TEST REPORT

Reference No.	:	WTX25X06169770W006
Manufacturer	:	Lumi United Technology Co., Ltd
Address	:	Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No. 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen,China
Product Name	:	Light Switch H2 Horizontal (4 Buttons, 3 Channels),Light Switch H2 Horizontal (2 Buttons, 2 Channels),Light Switch H2 Horizontal (2 Buttons, 1 Channel)
Model No.	:	WS-K14D,WS-K13D,WS-K12D
Standards	:	**AS 60669.2.1:2020**
Date of Receipt sample	:	2025-06-27
Date of Test	:	2025-06-27 to 2025-07-28
Date of Issue	:	2025-07-28
Test Report Form No.	:	WTX_AS 60669_2020_B
Test Result	:	**Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

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Tested by:

Dashan Chen/ Project Engineer

Approved by:

Jason Su/Manager

TABLE OF CONTENTS

Report version

Version No.	Date of issue	Description
Rev.00	2025-07-28	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Light Switch H2 Horizontal (4 Buttons, 3 Channels),Light Switch H2 Horizontal (2 Buttons, 2 Channels),Light Switch H2 Horizontal (2 Buttons, 1 Channel)
Trade Name:	Aqara
Model No.:	WS-K14D
Adding Model(s):	WS-K13D,WS-K12D
Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model WS-K14D, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Rated Voltage:	110-240VAC
Load Current:	/
Rated Power:	/
Power Adaptor Model:	/
Highest Internal Frequency:	Below 108MHz
Classification of Equipment:	Class B

1.2 Test Standards

The tests were performed according to following standards:

AS 60669.2.1:2020: Switches for household and similar fixed electrical installations - Part 2.1: Particular requirements - Electronic control devices.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

1.3 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission/immunity level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List			
Test Mode	Description	Remark	Power Supply Mode
TM1	Normal working	Connect to the AC Cable; EUT Model: WS-K14D	AC230V
TM2	Standby mode	Connect to the AC Cable; EUT Model: WS-K14D	AC230V
TM3	Normal working	Connect to the AC Cable; EUT Model: WS-K13D	AC230V
TM4	Standby mode	Connect to the AC Cable; EUT Model: WS-K13D	AC230V
TM5	Normal working	Connect to the AC Cable; EUT Model: WS-K12D	AC230V
TM6	Standby mode	Connect to the AC Cable; EUT Model: WS-K12D	AC230V
The worst case			

EUT Cable List and Details				
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite	With / Without Chip
/	/	/	/	/

Special Cable List and Details				
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite	With / Without Chip
AC Cable	1.0	Unshielded	Without Ferrite	Without Chip

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

1.4 Performance Criteria for EMS

All the test data has been collected, reduced, and analyzed within this report in accordance with Immunity requires the following as specific performance criteria:

A. The apparatus shall continue to operate as intended during and after the test. The manufacturer specifies some minimum performance level. The performance level may be specified by the manufacturer as a permissible loss of performance.
B. The apparatus shall continue to operate as intended after the test. This indicates that the EUT does not need to function at normal performance levels during the test, but must recover. Again some minimal performance is defined by the manufacturer. No change in operating state or loss of data is permitted.
C. Temporary loss of function is allowed. Operation of the EUT may stop as long as it is either automatically reset or can be manually restored by operation of the controls.

1.5 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal. Date	Due. Date
☐Chamber A:Below 1GHz					
Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2025-02-23	2026-02-22
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2025-02-23	2026-02-22
Trilog Broadband Antenna	Schwarz beck	VULB9163	9163-333	2023-03-20	2026-03-19
Amplifier	HP	8447F	2805A03475	2025-02-23	2026-02-22
EMI Test Software (Radiated Emission A)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)	/	/
☐Chamber A:Above 1GHz					
Amplifier	C&D	PAP-1G18	2002	2025-02-23	2026-02-22
Horn Antenna	ETS	3117	00086197	2025-02-23	2026-02-22
Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2025-02-23	2026-02-22
EMI Test Software (Radiated Emission A)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)	/	/
☒Chamber B:Below 1GHz					
Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2024-03-17	2027-03-16
Amplifier	Agilent	8447D	2944A10457	2025-02-23	2026-02-22
EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2025-02-23	2026-02-22
EMI Test Software (Radiated Emission B)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)	/	/
☐Chamber C:Below 1GHz					
EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
Amplifier	HP	8447F	2944A03869	2025-02-23	2026-02-22
EMI Test Software (Radiated Emission C)	Farad	EZ-EMC	RA-03A1-2 (1.1.4.2)	/	/
☐Chamber C:Above 1GHz					
Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
Amplifier	HP	8447F	2944A03869	2025-02-23	2026-02-22
EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
EMI Test Software (Radiated Emission C)	Farad	EZ-EMC	RA-03A1-2 (1.1.4.2)	/	/

☒Conducted Room 1#					
EMI Test Receiver	Rohde & Schwarz	ESCI	100525	2024-12-08	2025-12-07
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2025-02-23	2026-02-22
AC LISN	Schwarz beck	NSLK8126	8126-279	2025-02-23	2026-02-22
8-WIRE ISN CAT5	Schwarz beck	8158	CAT5-8158-0117	2025-02-23	2026-02-22
EMI Test Software (Conducted Emission Room 1#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3	/	/
☐Conducted Room 2#					
EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2025-02-23	2026-02-22
LISN	Rohde & Schwarz	ENV 216	100097	2025-02-23	2026-02-22
EMI Test Software (Conducted Emission Room 2#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3	/	/
☐Harmonics &Flicker					
Digital Power Analyzer	California Instrument	CTS	72831	2025-02-23	2026-02-22
Power Source	California Instrument	5001IX-CTS-400	60077	2025-02-23	2026-02-22
Test Software (Harmonics &Flicker)	AMETEK	CTS4	4.32	/	/
☒Electrostatic discharges					
ESD Generator	LIONCEL	ESD-203B	0170901	2025-02-23	2026-02-22
☒Power-frequency magnetic field (PFMF)					
PMF Generator	LIONCEL	PMF-801C-C	0171101	2025-02-23	2026-02-22
PMF Antenna	LIONCEL	PMF-801C-A	0180302	2025-02-23	2026-02-22
Instantaneous PMF Generator Module	LIONCEL	PMF-801C-T	0171001	2025-02-23	2026-02-22
☒Electronic fast transient(EFT)					
EFT Generator	EVERFINE	EMS61000-4A	P635789CS1441117	2025-06-11	2026-06-10
Couple Clamp	EMC PARTNER	CN-EFT1000	513	2025-02-23	2026-02-22
☒ Surges					
Surge Generator	EVERFINE	EMS61000-5A	P612004TD1441112	2025-06-11	2026-06-10
☐ Surge signal port					
Surge Generator	EVERFINE	EMS61000-5D	P661587TN1431113	2025-06-11	2026-06-10
Surge Generator	EVERFINE	EMS61000-5A	P612004TD1441112	2025-06-11	2026-06-10
Signal Lines CDN	EVERFINE	SGN-5	P619136T01441	2025-06-11	2026-06-10

			114		
Telecommunication Lines CDN	EVERFINE	SGN-8	P619137TN1441112	2025-06-11	2026-06-10
☒ Dips					
Voltage sag generator	EVERFINE	EMS61000-11C	P660569CM1451112	2025-06-11	2026-06-10
☒Radio frequency, continuous conducted (C/S)					
CONDUCTED IMMUNITY TEST SYSTEM	FRANKONIA	CIT-10/75	126B1247/2013	2025-02-23	2026-02-22
Attenuator	EMTEST	MA-5100/6BF2	1009	2025-02-23	2026-02-22
CDN	Luthi	L-801M2/M3	2665	2025-02-23	2026-02-22
CDN	LIONCEL	CDN-T8	0210401	2025-02-23	2026-02-22
EM Clamp	TESEQ	KEMZ801A	45028	2025-02-23	2026-02-22
Test Software (Radio frequency, Continuous conducted)	SKET	EMC-S	V1.4.0.16	/	/
☒Radio frequency electromagnetic Field (R/S)					
Signal Generator	HP	8665B	3438A00604	2025-02-23	2026-02-22
Power Sensor	Agilent	E9301A	MY52450001	2025-02-23	2026-02-22
Power Sensor	Agilent	E9304A	MY55081055	2025-02-23	2026-02-22
RF Power Amplifier	MicoTop	MPA-80-1000-250	MPA1906239	2025-02-23	2026-02-22
RF Power Amplifier	MicoTop	MPA-1000-6000-100	MPA1906238	2025-02-23	2026-02-22
Antenna	SCHWARZBECK	STLP 9129	9129 114	/	/
Power Meter	Agilent	E4419B	GB42420578	2025-02-23	2026-02-22
Test Software (Radio frequency electromagnetic Field)	EMtrace	EM3	V1.2.6.2	/	/

2. SUMMARY OF TEST RESULTS

Standards	Description of Test Item	Result
AS 60669.2.1	Conducted Emission in accordance With CISPR 15	Compliant
	Radiated Electromagnetic Disturbances With CISPR 15 (9kHz to 30MHz)	Compliant
	Radiated Emission in accordance With CISPR 15 (30MHz to 1000MHz)	Compliant
	Harmonic Current Emission in accordance With IEC 61000-3-2	Compliant
	Voltage Fluctuation and Flicker in accordance With IEC 61000-3-3	Compliant
	Electrostatic Discharge Immunity in accordance with IEC 61000-4-2	Compliant
	Continuous RF electromagnetic field Disturbances Immunity in accordance with IEC 61000-4-3	Compliant
	Electrical Fast Transient/Burst Immunity in Accordance with IEC 61000-4-4	Compliant
	Surges Immunity in accordance with IEC 61000-4-5	Compliant
	Continuous induced RF disturbances Immunity in accordance with IEC 61000-4-6	Compliant
	Power-frequency Magnetic Fields Immunity in accordance With IEC 61000-4-8	Compliant
	Voltage Dips/Interruptions Immunity in accordance with IEC 61000-4-11	Compliant

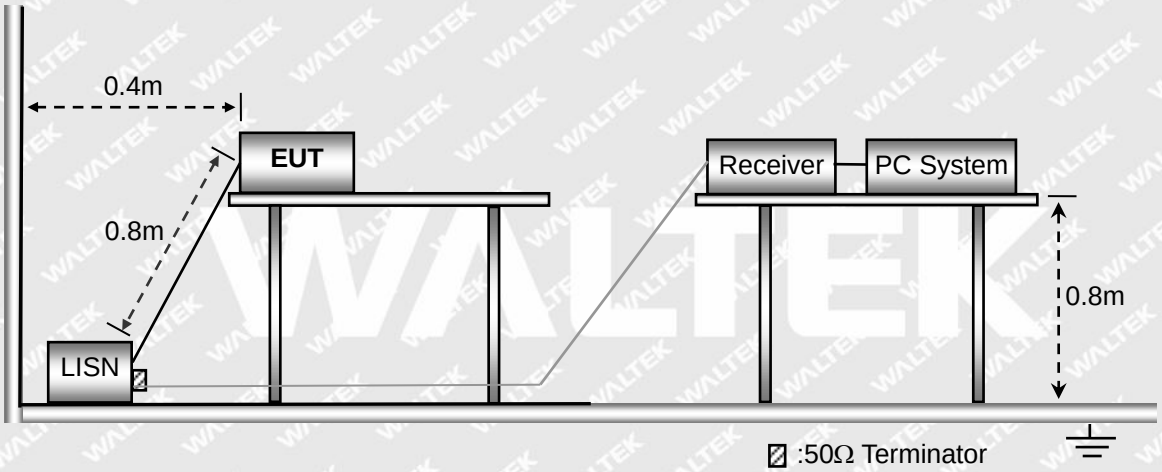
3. Conducted Emission

3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement:

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB

3.2 Basic Test Setup Block Diagram



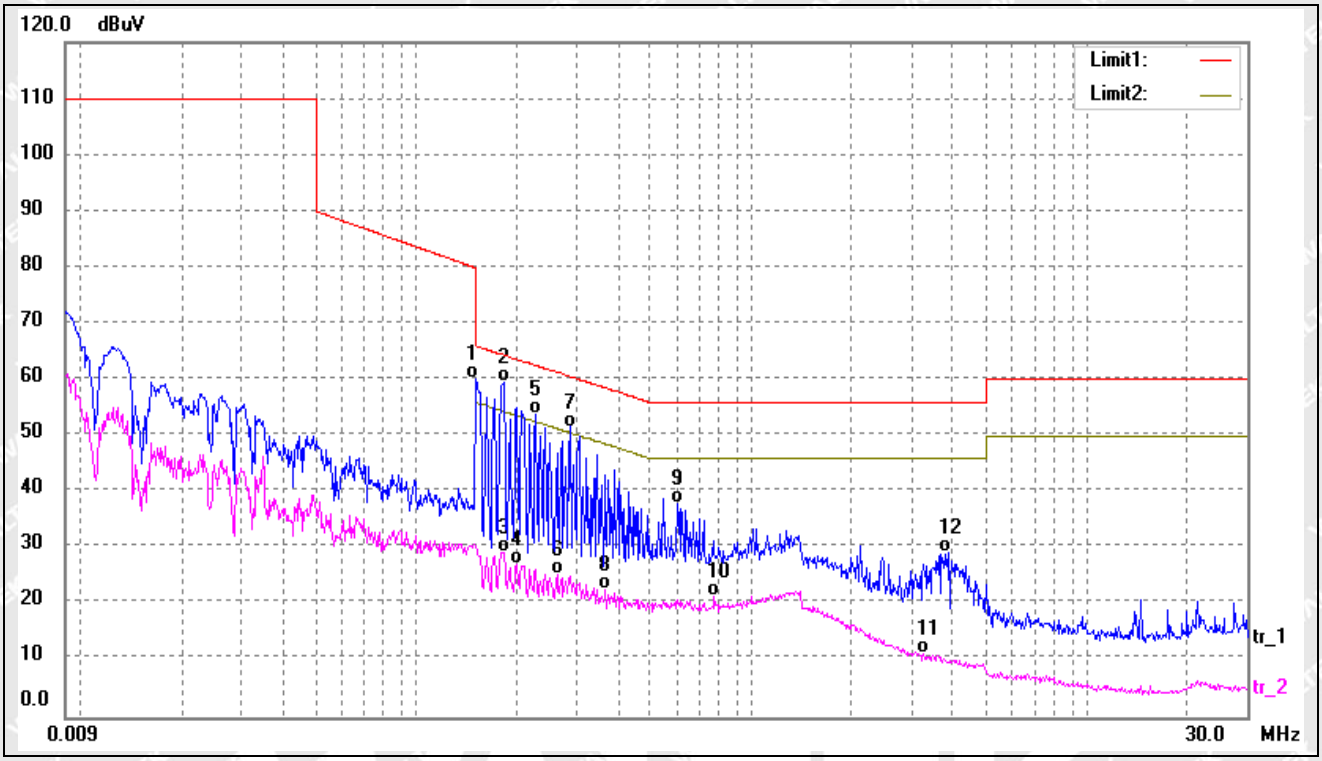
3.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	998 mbar

3.4 Summary of Test Results

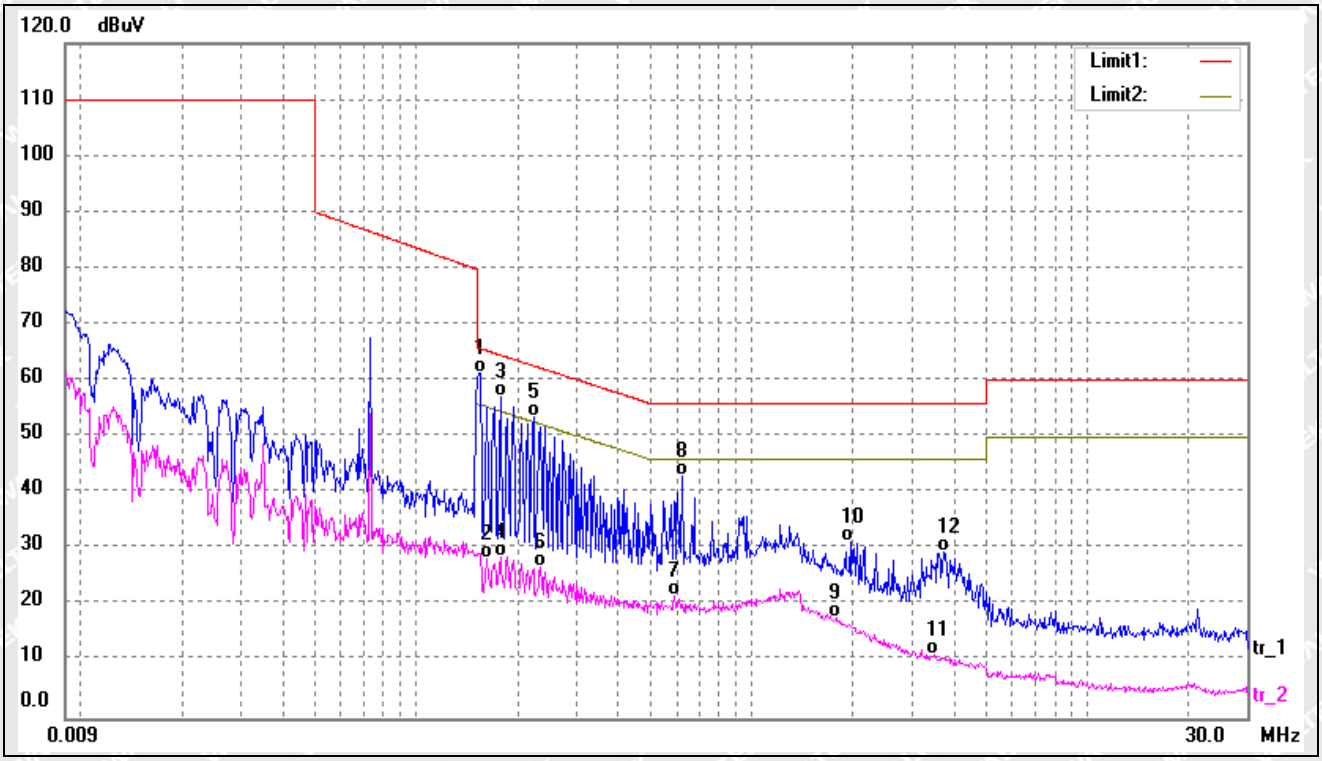
Please find the results below:

Test mode:	TM1	Polarity:	Neutral



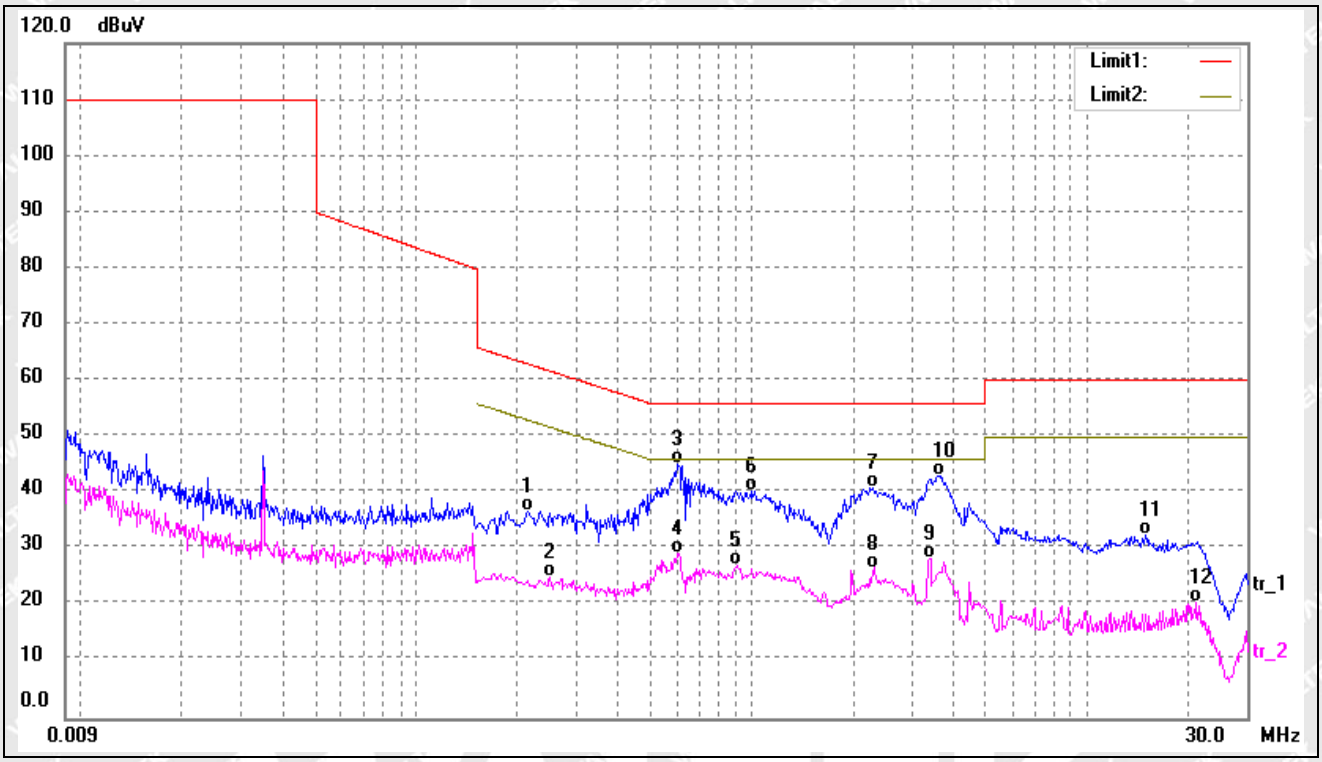
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1500	50.62	9.43	60.05	65.99	-5.94	QP
2*	0.1819	49.85	9.56	59.41	64.39	-4.98	QP
3	0.1819	19.82	9.56	29.38	54.39	-25.01	AVG
4	0.1980	17.48	9.62	27.10	53.69	-26.59	AVG
5	0.2260	44.34	9.63	53.97	62.59	-8.62	QP
6	0.2620	15.70	9.63	25.33	51.36	-26.03	AVG
7	0.2860	41.97	9.63	51.60	60.64	-9.04	QP
8	0.3660	12.95	9.64	22.59	48.59	-26.00	AVG
9	0.6020	28.31	9.69	38.00	56.00	-18.00	QP
10	0.7780	11.73	9.75	21.48	46.00	-24.52	AVG
11	3.2740	1.79	9.41	11.20	46.00	-34.80	AVG
12	3.8540	19.67	9.45	29.12	56.00	-26.88	QP

Test mode:	TM1	Polarity:	Line



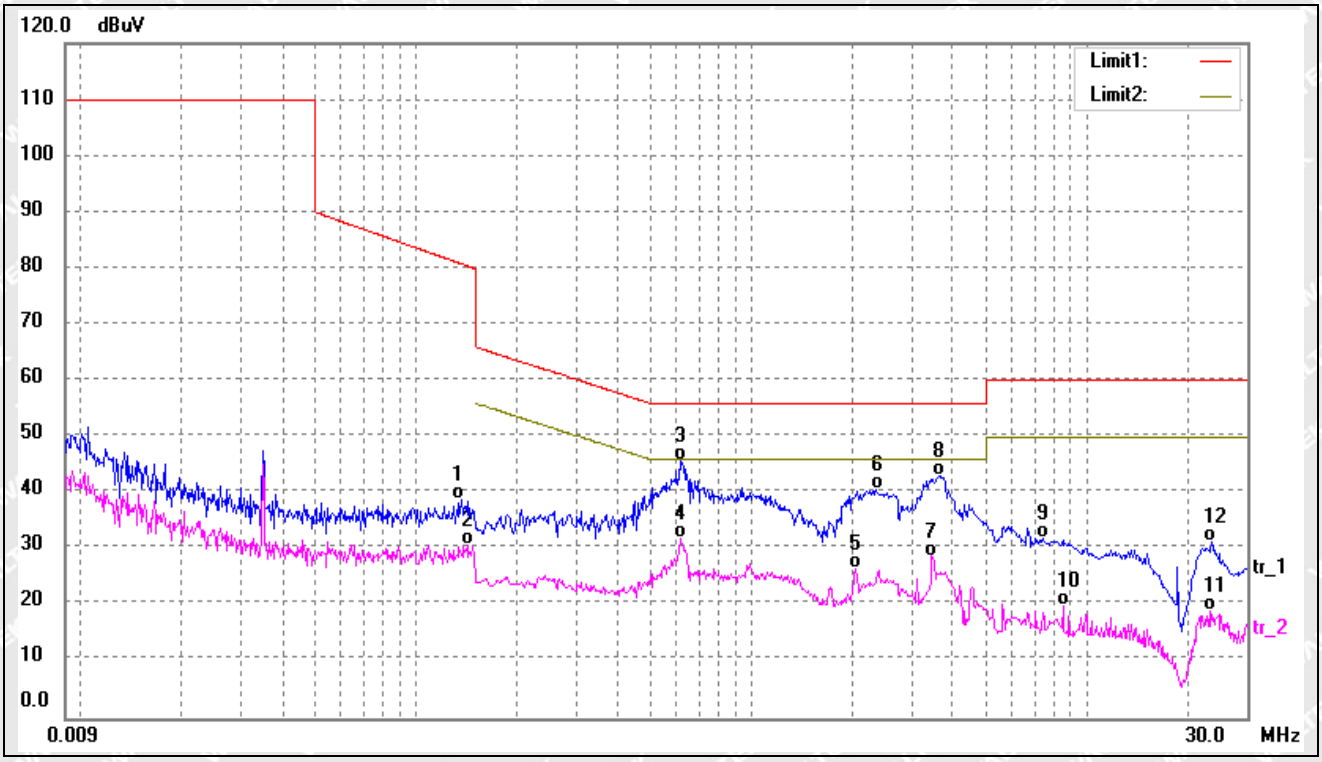
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1539	51.96	9.45	61.41	65.78	-4.37	QP
2	0.1620	18.77	9.48	28.25	55.36	-27.11	AVG
3	0.1780	47.53	9.54	57.07	64.57	-7.50	QP
4	0.1780	19.08	9.54	28.62	54.57	-25.95	AVG
5	0.2220	43.94	9.63	53.57	62.74	-9.17	QP
6	0.2340	17.35	9.63	26.98	52.30	-25.32	AVG
7	0.5899	12.13	9.69	21.82	46.00	-24.18	AVG
8	0.6260	33.39	9.70	43.09	56.00	-12.91	QP
9	1.7940	8.31	9.44	17.75	46.00	-28.25	AVG
10	1.9740	21.98	9.37	31.35	56.00	-24.65	QP
11	3.4980	1.88	9.42	11.30	46.00	-34.70	AVG
12	3.7460	20.08	9.45	29.53	56.00	-26.47	QP

Test mode:	TM2	Polarity:	Neutral



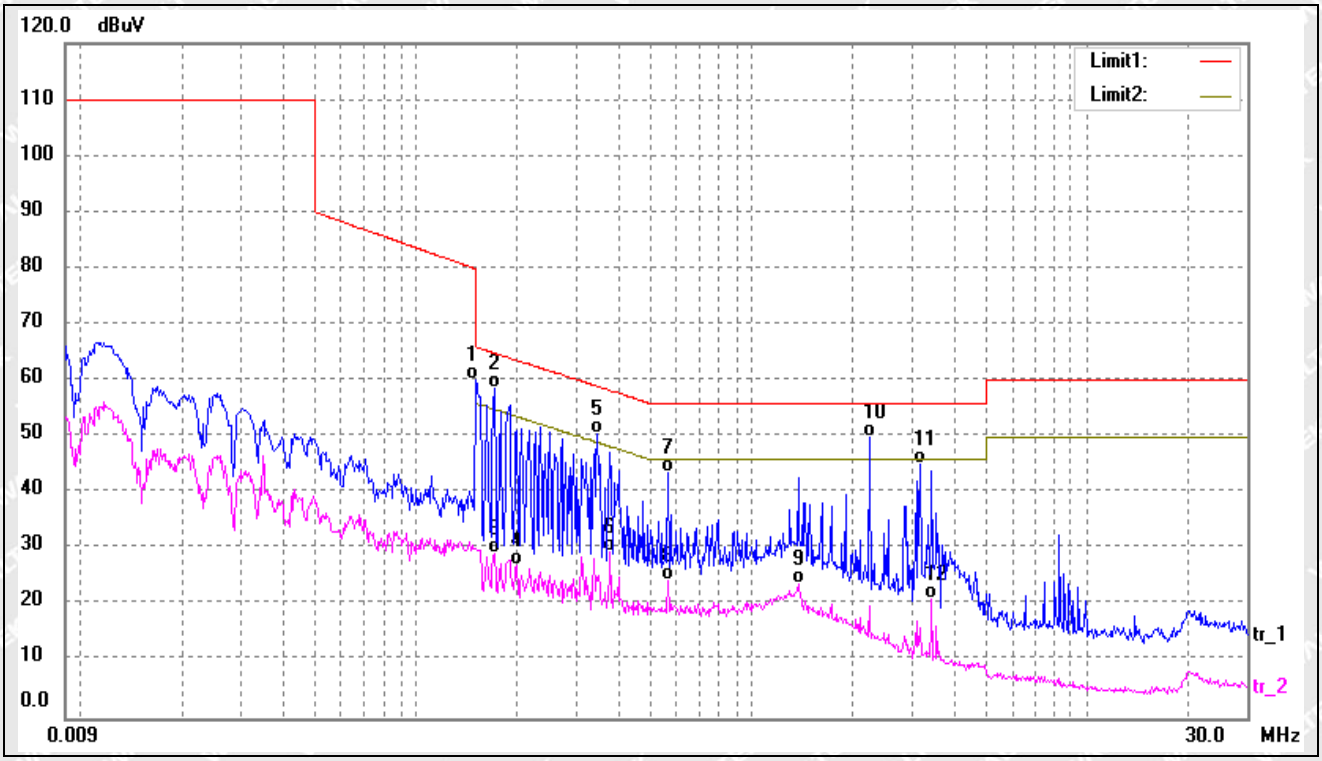
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.2140	27.04	9.63	36.67	63.04	-26.37	QP
2	0.2500	15.39	9.63	25.02	51.75	-26.73	AVG
3*	0.6020	35.42	9.69	45.11	56.00	-10.89	QP
4	0.6100	19.61	9.69	29.30	46.00	-16.70	AVG
5	0.9060	17.36	9.75	27.11	46.00	-18.89	AVG
6	1.0260	30.71	9.75	40.46	56.00	-15.54	QP
7	2.2700	31.58	9.37	40.95	56.00	-15.05	QP
8	2.3140	17.32	9.38	26.70	46.00	-19.30	AVG
9	3.4220	19.07	9.42	28.49	46.00	-17.51	AVG
10	3.5860	33.75	9.44	43.19	56.00	-12.81	QP
11	15.0100	23.10	9.51	32.61	60.00	-27.39	QP
12	21.2780	11.00	9.54	20.54	50.00	-29.46	AVG

Test mode:	TM2	Polarity:	Line



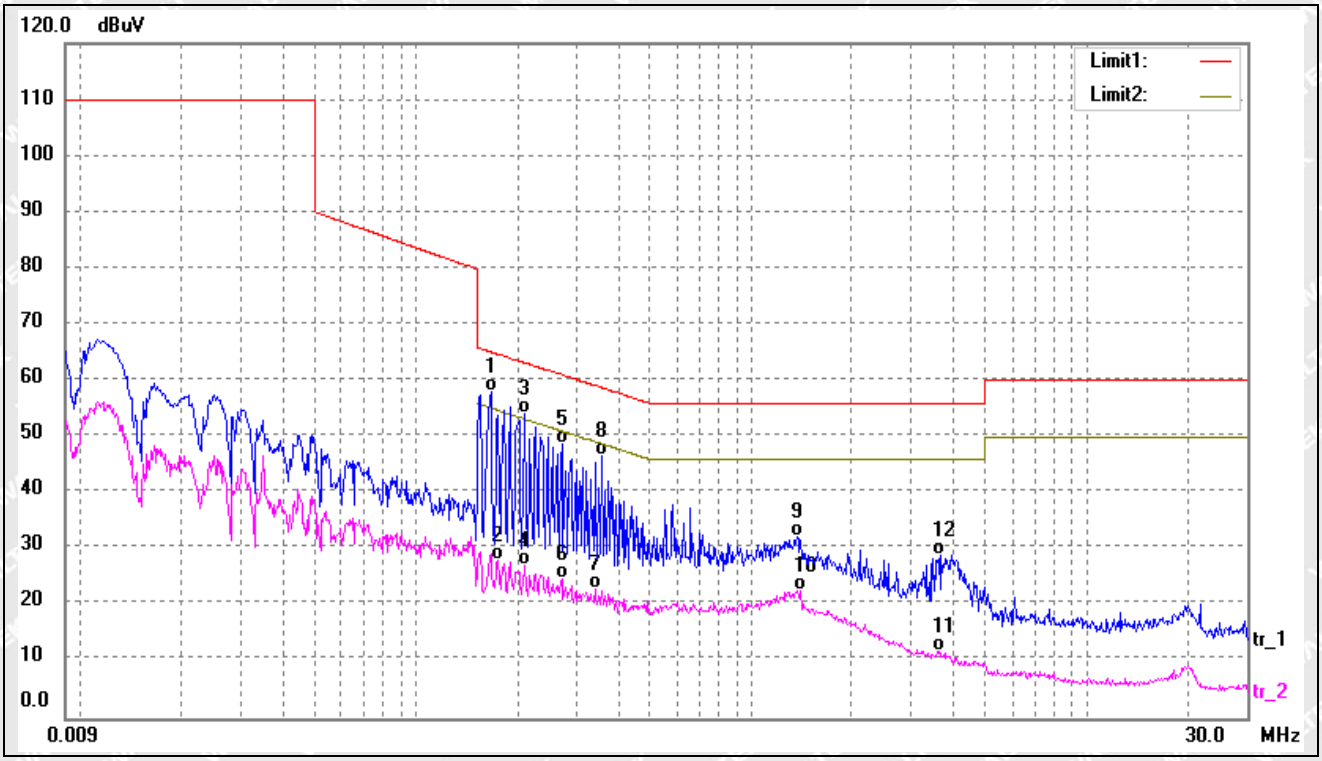
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1373	29.29	9.44	38.73	80.80	-42.07	QP
2	0.1420	21.22	9.44	30.66	56.45	-25.79	AVG
3*	0.6140	36.00	9.70	45.70	56.00	-10.30	QP
4	0.6140	22.32	9.70	32.02	46.00	-13.98	AVG
5	2.0420	17.07	9.36	26.43	46.00	-19.57	AVG
6	2.3500	31.14	9.38	40.52	56.00	-15.48	QP
7	3.4580	19.38	9.42	28.80	46.00	-17.20	AVG
8	3.6300	33.65	9.44	43.09	56.00	-12.91	QP
9	7.4100	22.21	9.79	32.00	60.00	-28.00	QP
10	8.4980	10.25	9.80	20.05	50.00	-29.95	AVG
11	23.1660	9.49	9.54	19.03	50.00	-30.97	AVG
12	23.5500	21.77	9.54	31.31	60.00	-28.69	QP

Test mode:	TM3	Polarity:	Neutral



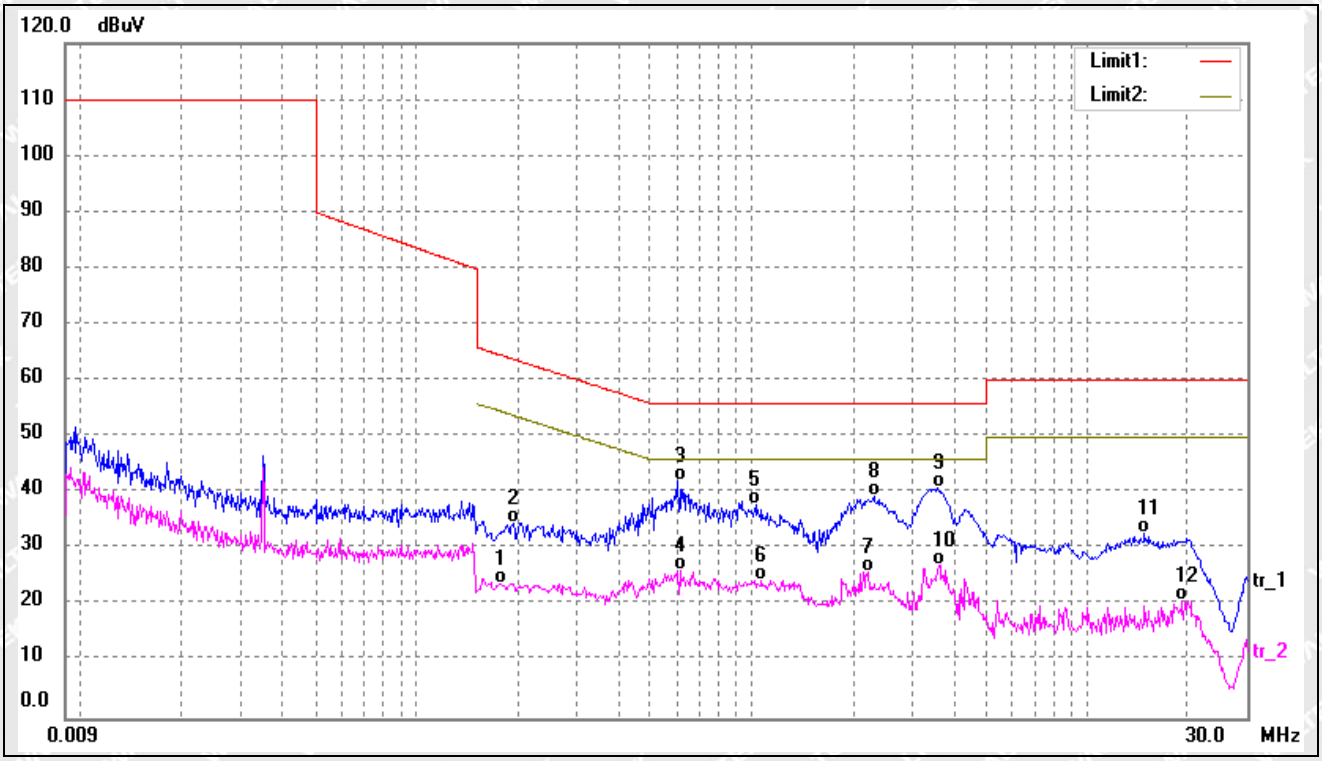
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1*	0.1500	50.73	9.53	60.26	65.99	-5.73	QP
2	0.1700	48.92	9.61	58.53	64.96	-6.43	QP
3	0.1700	19.65	9.61	29.26	54.96	-25.70	AVG
4	0.1980	17.37	9.72	27.09	53.69	-26.60	AVG
5	0.3460	41.05	9.58	50.63	59.06	-8.43	QP
6	0.3780	19.99	9.56	29.55	48.32	-18.77	AVG
7	0.5660	34.25	9.48	43.73	56.00	-12.27	QP
8	0.5660	14.99	9.48	24.47	46.00	-21.53	AVG
9	1.3860	14.21	9.65	23.86	46.00	-22.14	AVG
10	2.2540	40.17	9.91	50.08	56.00	-5.92	QP
11	3.1860	35.35	9.71	45.06	56.00	-10.94	QP
12	3.4460	11.59	9.66	21.25	46.00	-24.75	AVG

Test mode:	TM3	Polarity:	Line



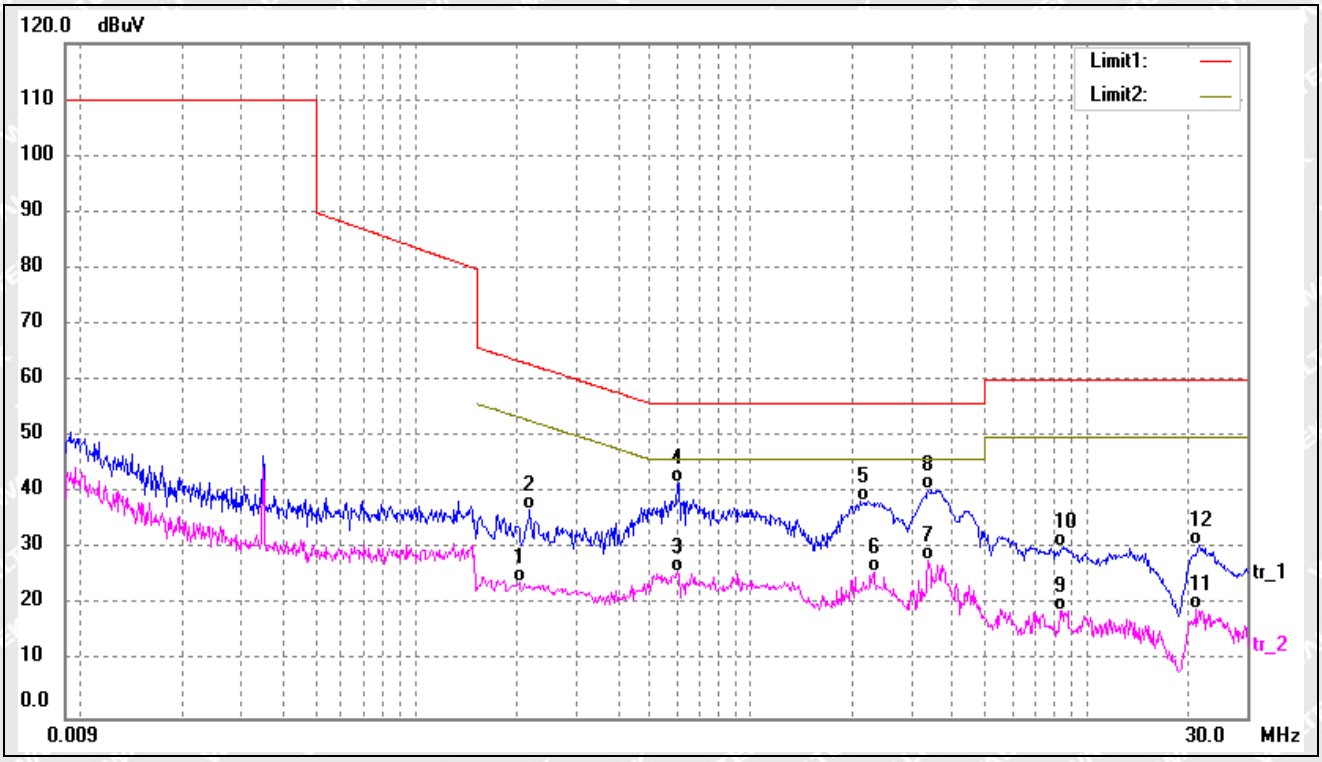
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1*	0.1660	48.56	9.59	58.15	65.15	-7.00	QP
2	0.1740	18.37	9.63	28.00	54.76	-26.76	AVG
3	0.2100	44.36	9.72	54.08	63.20	-9.12	QP
4	0.2100	17.47	9.72	27.19	53.20	-26.01	AVG
5	0.2700	39.02	9.66	48.68	61.12	-12.44	QP
6	0.2700	15.23	9.66	24.89	51.12	-26.23	AVG
7	0.3420	13.40	9.59	22.99	49.15	-26.16	AVG
8	0.3580	37.16	9.58	46.74	58.77	-12.03	QP
9	1.3700	22.71	9.65	32.36	56.00	-23.64	QP
10	1.3980	12.91	9.66	22.57	46.00	-23.43	AVG
11	3.6140	2.26	9.64	11.90	46.00	-34.10	AVG
12	3.6780	19.39	9.62	29.01	56.00	-26.99	QP

Test mode:	TM4	Polarity:	Neutral



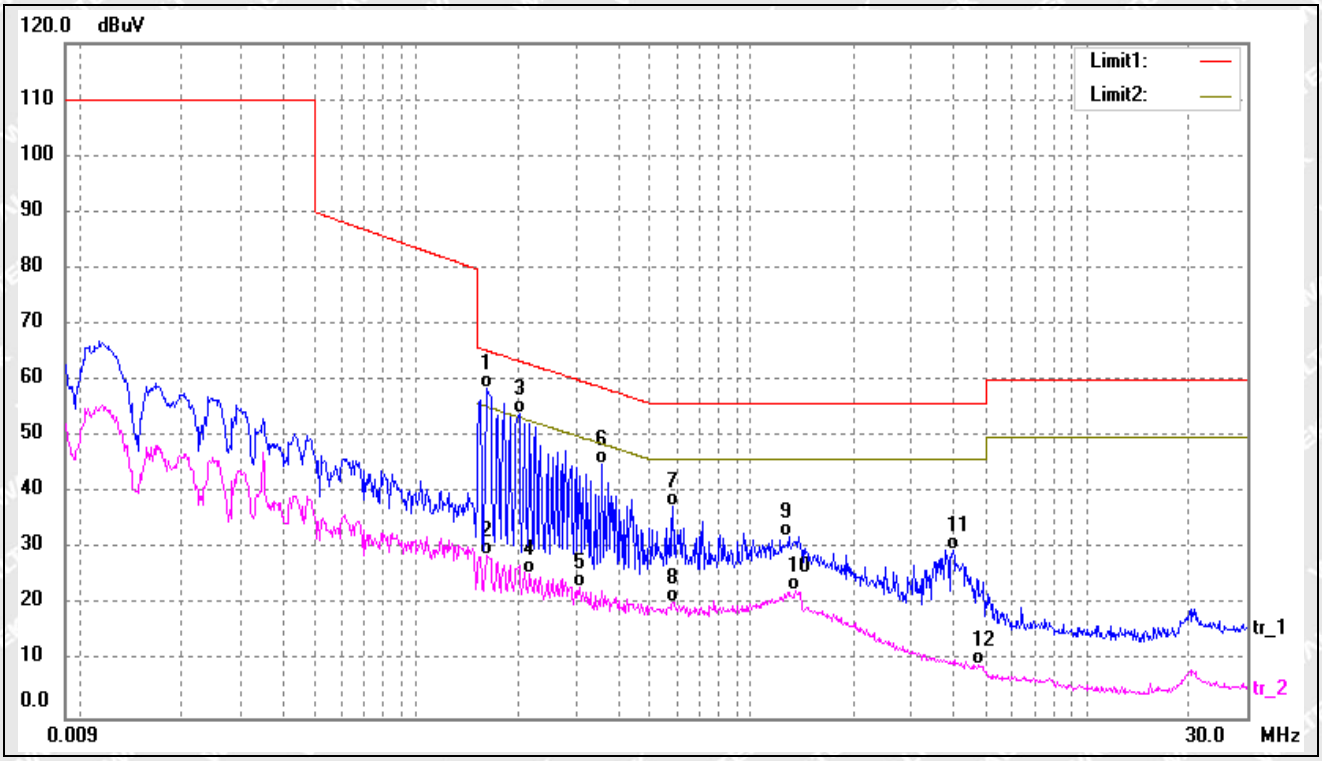
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1780	14.33	9.64	23.97	54.57	-30.60	AVG
2	0.1940	25.08	9.71	34.79	63.86	-29.07	QP
3*	0.6060	32.66	9.49	42.15	56.00	-13.85	QP
4	0.6140	16.90	9.50	26.40	46.00	-19.60	AVG
5	1.0420	28.35	9.48	37.83	56.00	-18.17	QP
6	1.0700	15.07	9.50	24.57	46.00	-21.43	AVG
7	2.2220	15.97	9.92	25.89	46.00	-20.11	AVG
8	2.3300	29.45	9.89	39.34	56.00	-16.66	QP
9	3.6100	31.23	9.64	40.87	56.00	-15.13	QP
10	3.6500	17.58	9.63	27.21	46.00	-18.79	AVG
11	14.9020	23.31	9.61	32.92	60.00	-27.08	QP
12	19.2979	11.02	9.81	20.83	50.00	-29.17	AVG

Test mode:	TM4	Polarity:	Line



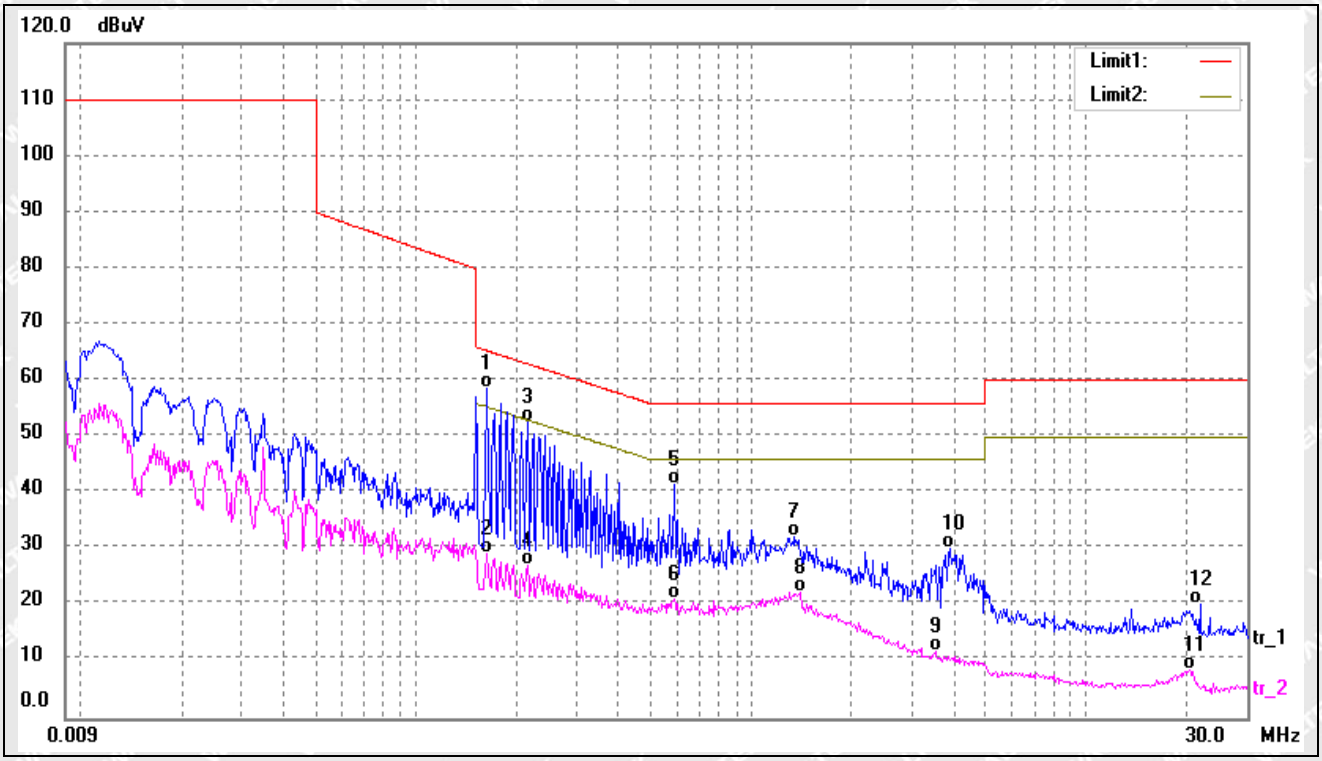
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.2020	14.30	9.73	24.03	53.52	-29.49	AVG
2	0.2179	27.23	9.71	36.94	62.89	-25.95	QP
3	0.6059	16.60	9.49	26.09	46.00	-19.91	AVG
4*	0.6099	32.22	9.50	41.72	56.00	-14.28	QP
5	2.1259	28.66	9.93	38.59	56.00	-17.41	QP
6	2.3260	16.13	9.89	26.02	46.00	-19.98	AVG
7	3.3820	18.31	9.67	27.98	46.00	-18.02	AVG
8	3.4620	30.88	9.66	40.54	56.00	-15.46	QP
9	8.3859	9.37	9.75	19.12	50.00	-30.88	AVG
10	8.5020	20.59	9.75	30.34	60.00	-29.66	QP
11	21.2300	9.49	9.88	19.37	50.00	-30.63	AVG
12	21.6340	20.72	9.89	30.61	60.00	-29.39	QP

Test mode:	TM5	Polarity:	Neutral



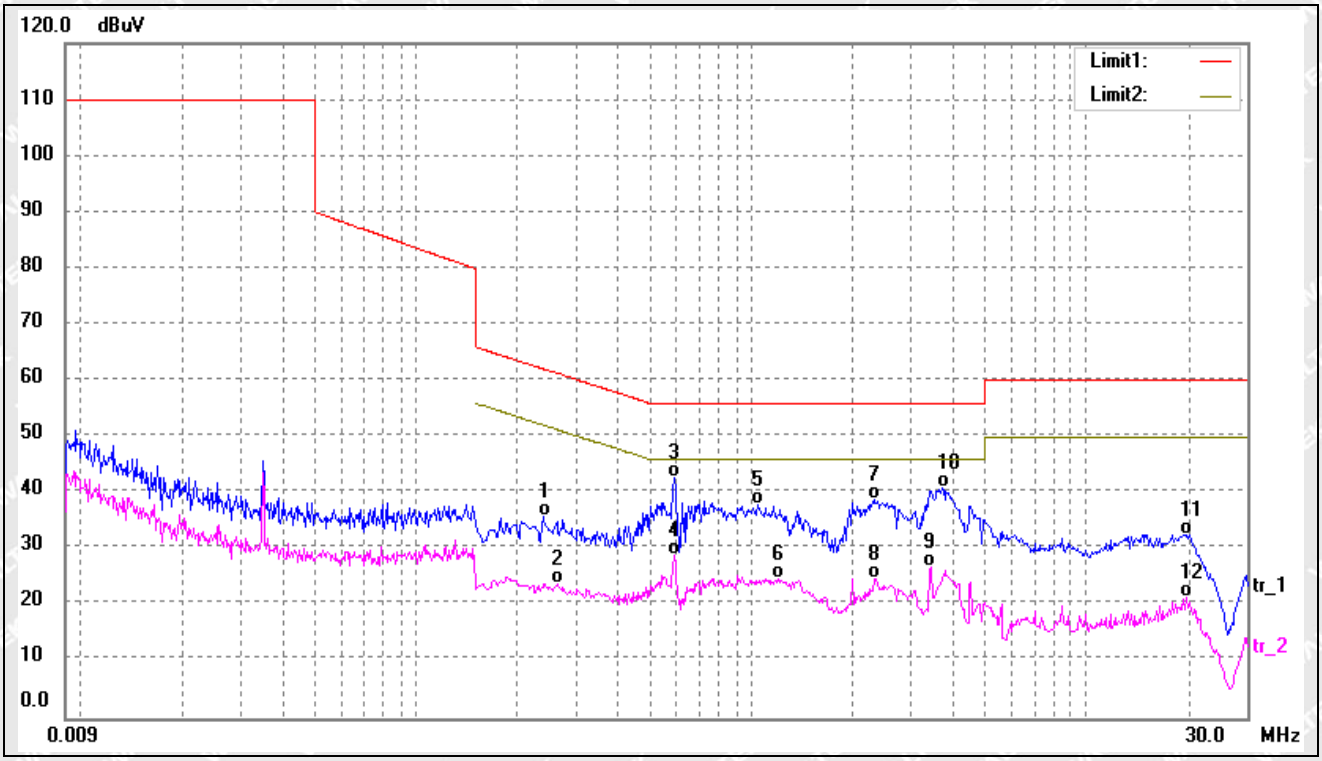
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1*	0.1620	49.08	9.58	58.66	65.36	-6.70	QP
2	0.1620	19.36	9.58	28.94	55.36	-26.42	AVG
3	0.2020	44.45	9.73	54.18	63.52	-9.34	QP
4	0.2180	16.06	9.71	25.77	52.89	-27.12	AVG
5	0.3060	13.58	9.62	23.20	50.08	-26.88	AVG
6	0.3580	35.49	9.58	45.07	58.77	-13.70	QP
7	0.5860	28.03	9.49	37.52	56.00	-18.48	QP
8	0.5899	11.08	9.49	20.57	46.00	-25.43	AVG
9	1.2980	22.77	9.61	32.38	56.00	-23.62	QP
10	1.3619	13.13	9.64	22.77	46.00	-23.23	AVG
11	4.0020	20.21	9.56	29.77	56.00	-26.23	QP
12	4.7940	-0.18	9.60	9.42	46.00	-36.58	AVG

Test mode:	TM5	Polarity:	Line



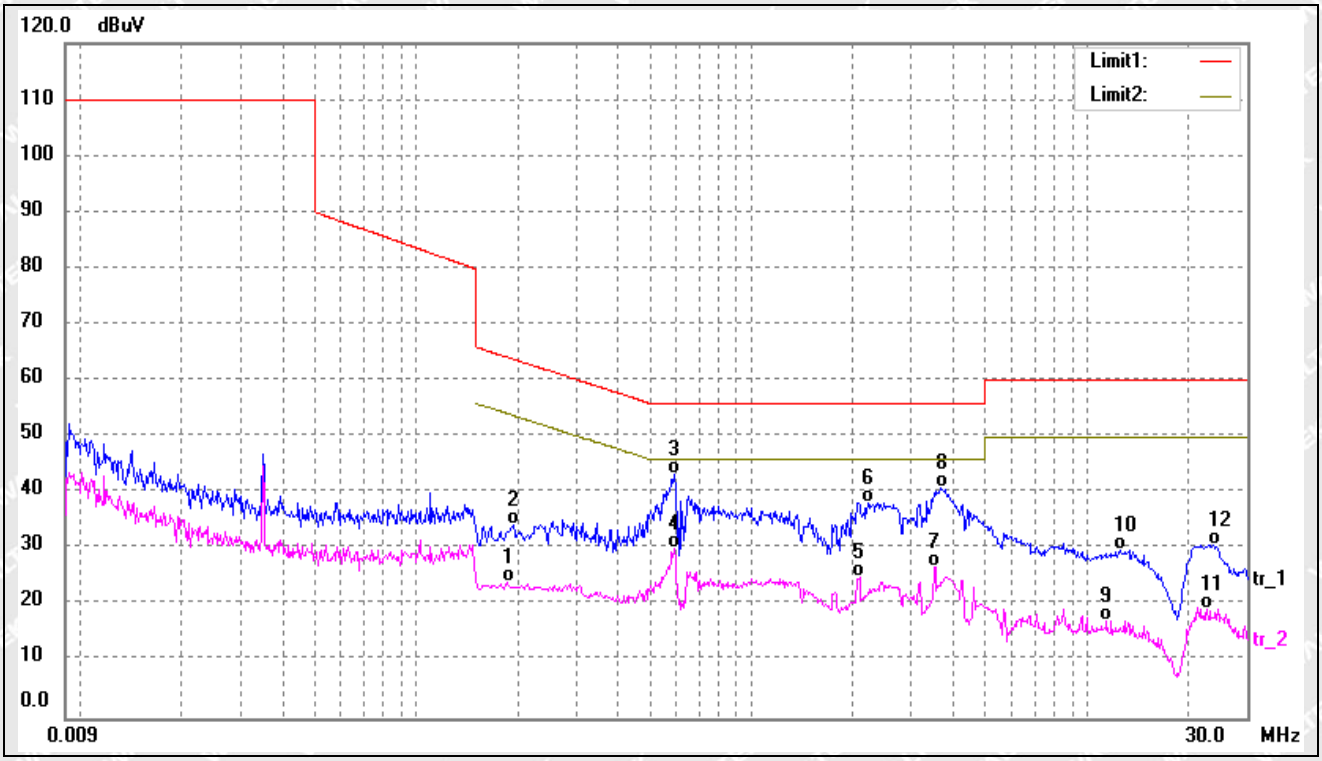
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1*	0.1620	49.17	9.58	58.75	65.36	-6.61	QP
2	0.1620	19.61	9.58	29.19	55.36	-26.17	AVG
3	0.2140	43.01	9.72	52.73	63.04	-10.31	QP
4	0.2140	17.55	9.72	27.27	53.04	-25.77	AVG
5	0.5899	32.15	9.49	41.64	56.00	-14.36	QP
6	0.5899	11.63	9.49	21.12	46.00	-24.88	AVG
7	1.3460	22.49	9.63	32.12	56.00	-23.88	QP
8	1.3980	12.69	9.66	22.35	46.00	-23.65	AVG
9	3.5260	2.13	9.65	11.78	46.00	-34.22	AVG
10	3.9140	20.68	9.58	30.26	56.00	-25.74	QP
11	20.3180	-1.28	9.85	8.57	50.00	-41.43	AVG
12	21.6900	10.28	9.89	20.17	60.00	-39.83	QP

Test mode:	TM6	Polarity:	Neutral



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.2380	26.17	9.69	35.86	62.16	-26.30	QP
2	0.2620	14.25	9.67	23.92	51.36	-27.44	AVG
3*	0.5899	33.39	9.49	42.88	56.00	-13.12	QP
4	0.5899	19.55	9.49	29.04	46.00	-16.96	AVG
5	1.0460	28.35	9.48	37.83	56.00	-18.17	QP
6	1.2020	15.27	9.56	24.83	46.00	-21.17	AVG
7	2.3260	28.88	9.89	38.77	56.00	-17.23	QP
8	2.3260	14.91	9.89	24.80	46.00	-21.20	AVG
9	3.4340	17.12	9.66	26.78	46.00	-19.22	AVG
10	3.7300	31.36	9.61	40.97	56.00	-15.03	QP
11	19.8340	22.77	9.83	32.60	60.00	-27.40	QP
12	19.8420	11.73	9.83	21.56	50.00	-28.44	AVG

Test mode:	TM6	Polarity:	Line



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1860	14.38	9.67	24.05	54.21	-30.16	AVG
2	0.1940	24.54	9.71	34.25	63.86	-29.61	QP
3*	0.5899	33.95	9.49	43.44	56.00	-12.56	QP
4	0.5899	20.74	9.49	30.23	46.00	-15.77	AVG
5	2.0980	15.23	9.94	25.17	46.00	-20.83	AVG
6	2.2220	28.43	9.92	38.35	56.00	-17.65	QP
7	3.5420	17.25	9.65	26.90	46.00	-19.10	AVG
8	3.6900	31.21	9.62	40.83	56.00	-15.17	QP
9	11.4980	7.61	9.75	17.36	50.00	-32.64	AVG
10	12.6140	20.20	9.71	29.91	60.00	-30.09	QP
11	22.8779	9.44	9.93	19.37	50.00	-30.63	AVG
12	23.7700	20.93	9.95	30.88	60.00	-29.12	QP

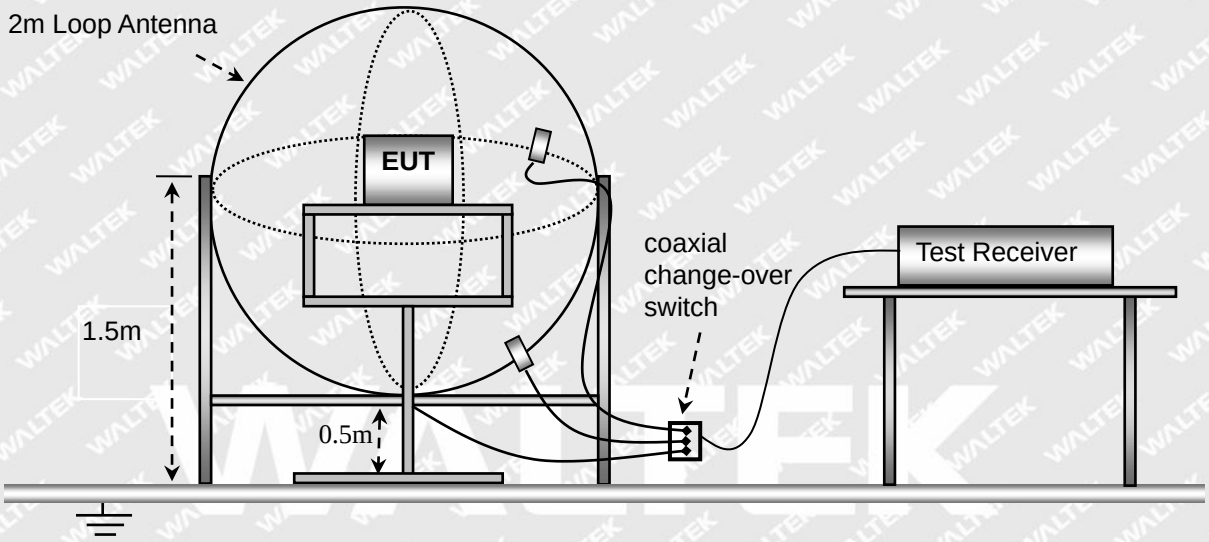
4. Radiated Electromagnetic Disturbances (9kHz to 30MHz)

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 3.6 dB.

4.2 Basic Test Setup Block Diagram

The Radiation Electromagnetic Disturbance (9kHz to 30MHz) test was performed in accordance with the CISPR 15



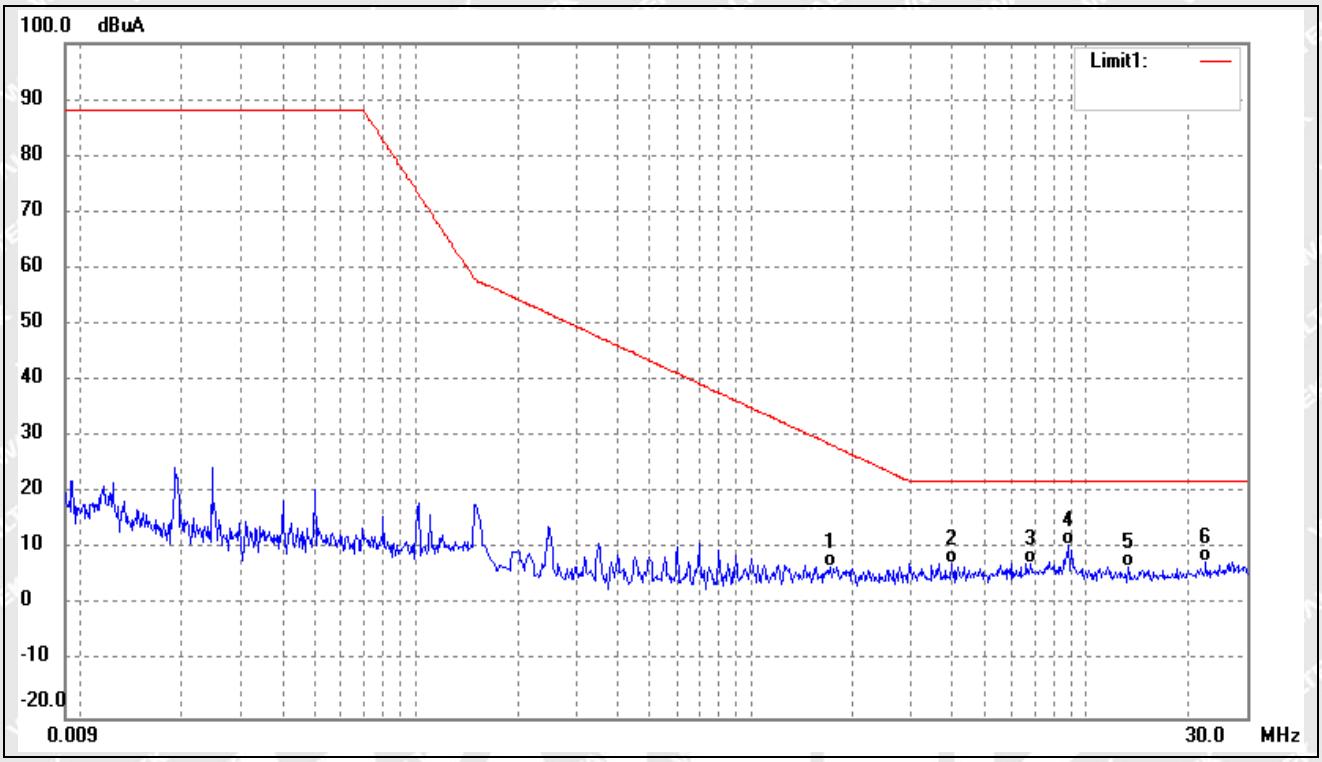
4.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	998 mbar

4.4 Summary of Test Results

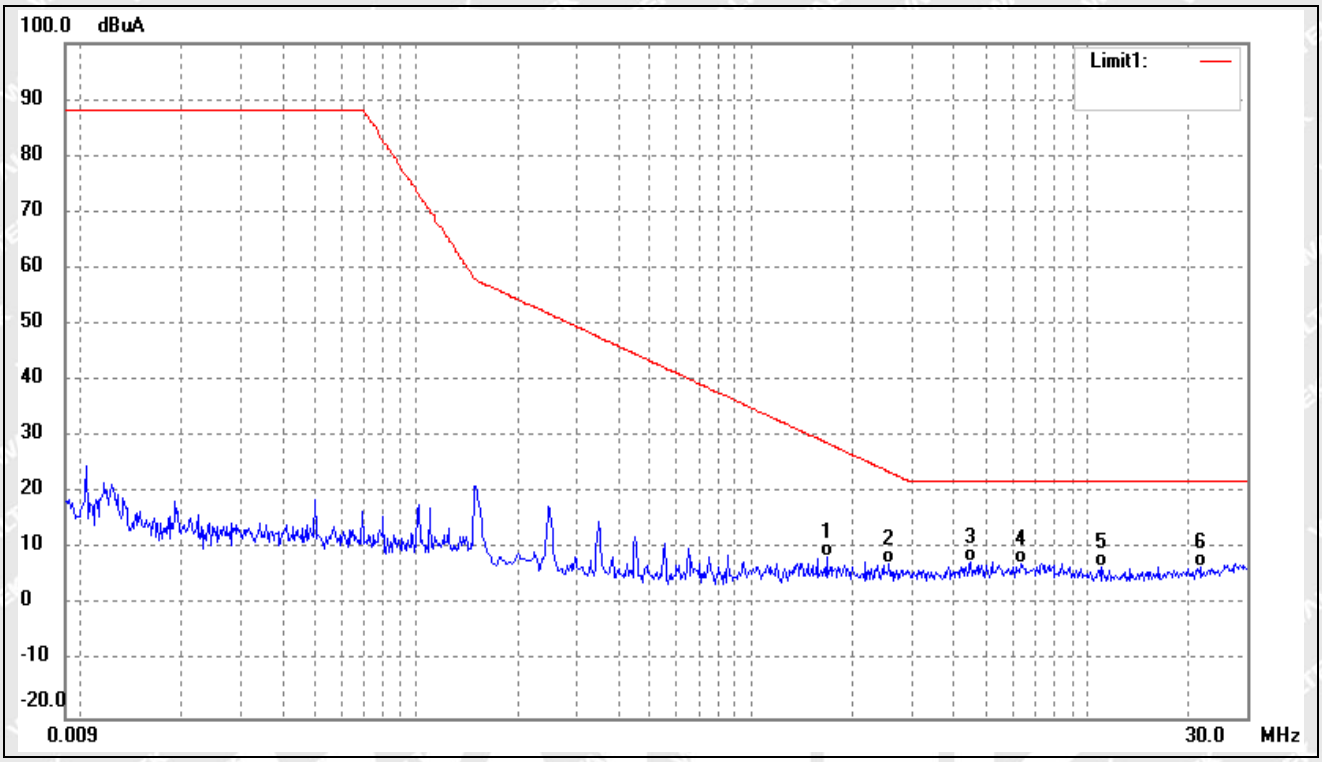
Please find the results below:

Test mode:	TM1	Polarity:	X



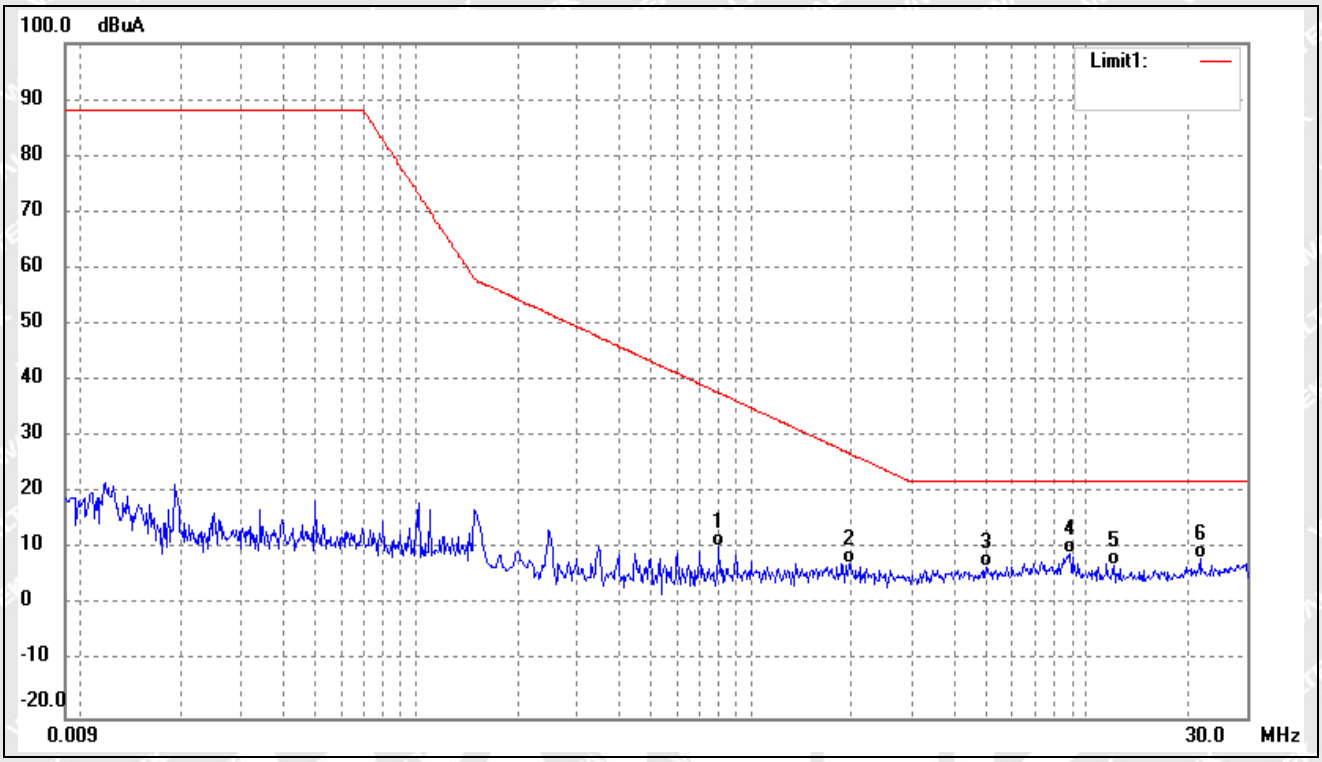
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuA)	(dB)	(dBuA)	(dBuA)	(dB)	
1	1.7140	6.71	0.00	6.71	28.73	-22.02	QP
2	3.9540	7.54	0.00	7.54	22.00	-14.46	QP
3	6.8460	7.57	0.00	7.57	22.00	-14.43	QP
4*	8.8820	10.87	0.00	10.87	22.00	-11.13	QP
5	13.2620	6.75	0.00	6.75	22.00	-15.25	QP
6	22.6740	7.84	0.00	7.84	22.00	-14.16	QP

Test mode:	TM1	Polarity:	Y



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuA)	(dB)	(dBuA)	(dBuA)	(dB)	
1	1.6780	8.53	0.00	8.53	28.98	-20.45	QP
2	2.5740	7.33	0.00	7.33	23.84	-16.51	QP
3*	4.5180	7.70	0.00	7.70	22.00	-14.30	QP
4	6.3420	7.40	0.00	7.40	22.00	-14.60	QP
5	11.0980	6.72	0.00	6.72	22.00	-15.28	QP
6	21.7220	6.74	0.00	6.74	22.00	-15.26	QP

Test mode:	TM1	Polarity:	Z



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuA)	(dB)	(dBuA)	(dBuA)	(dB)	
1	0.8020	10.34	0.00	10.34	37.85	-27.51	QP
2	1.9500	7.48	0.00	7.48	27.18	-19.70	QP
3	5.0220	6.89	0.00	6.89	22.00	-15.11	QP
4*	8.8860	9.39	0.00	9.39	22.00	-12.61	QP
5	12.0659	7.04	0.00	7.04	22.00	-14.96	QP
6	21.8260	8.23	0.00	8.23	22.00	-13.77	QP

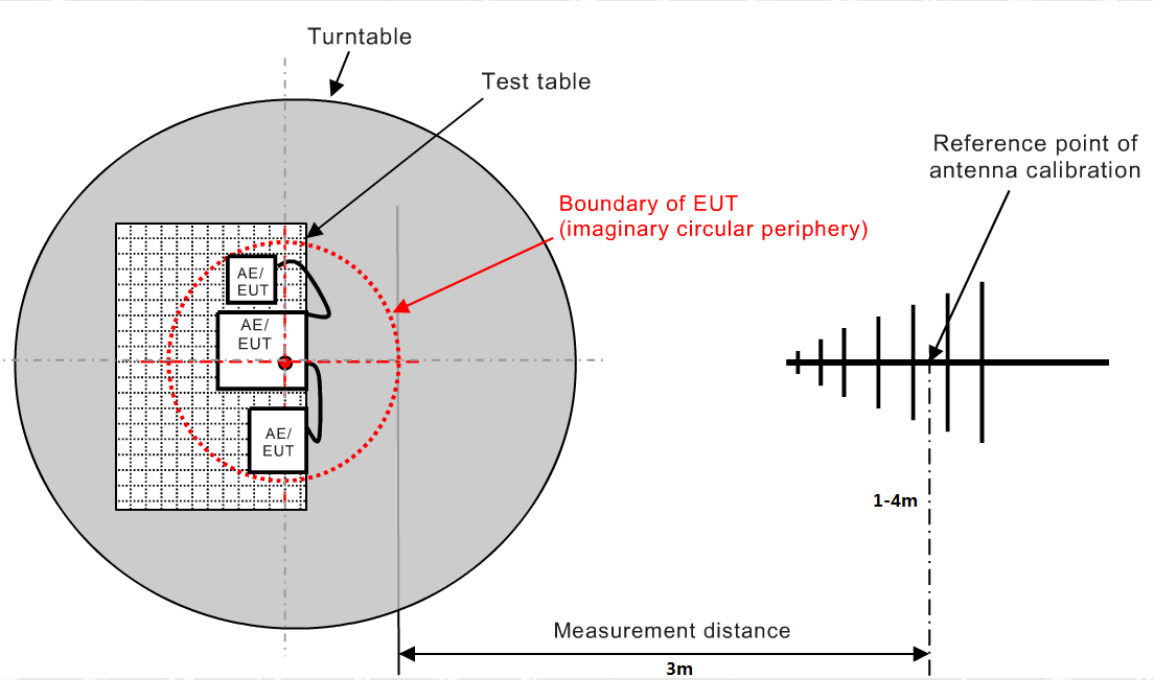
5. Radiated Emission (30MHz to 1000MHz)

5.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement:

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Radiated Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

5.2 Basic Test Setup Block Diagram



5.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Correct

Correct=Ant.Factor + Cable Loss - Ampl.Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for CISPR 14 device. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – CISPR 14 Limit

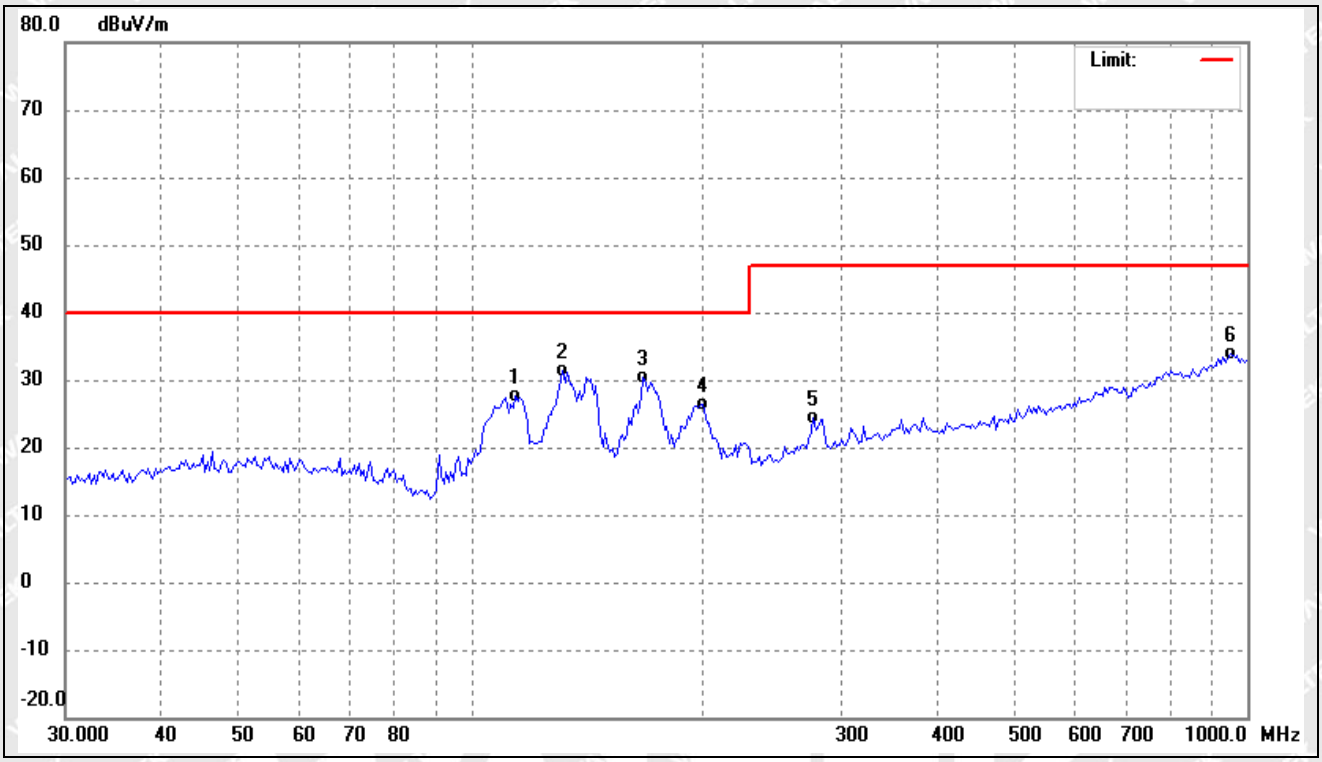
5.4 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54 %
ATM Pressure:	998 mbar

5.5 Summary of Test Results

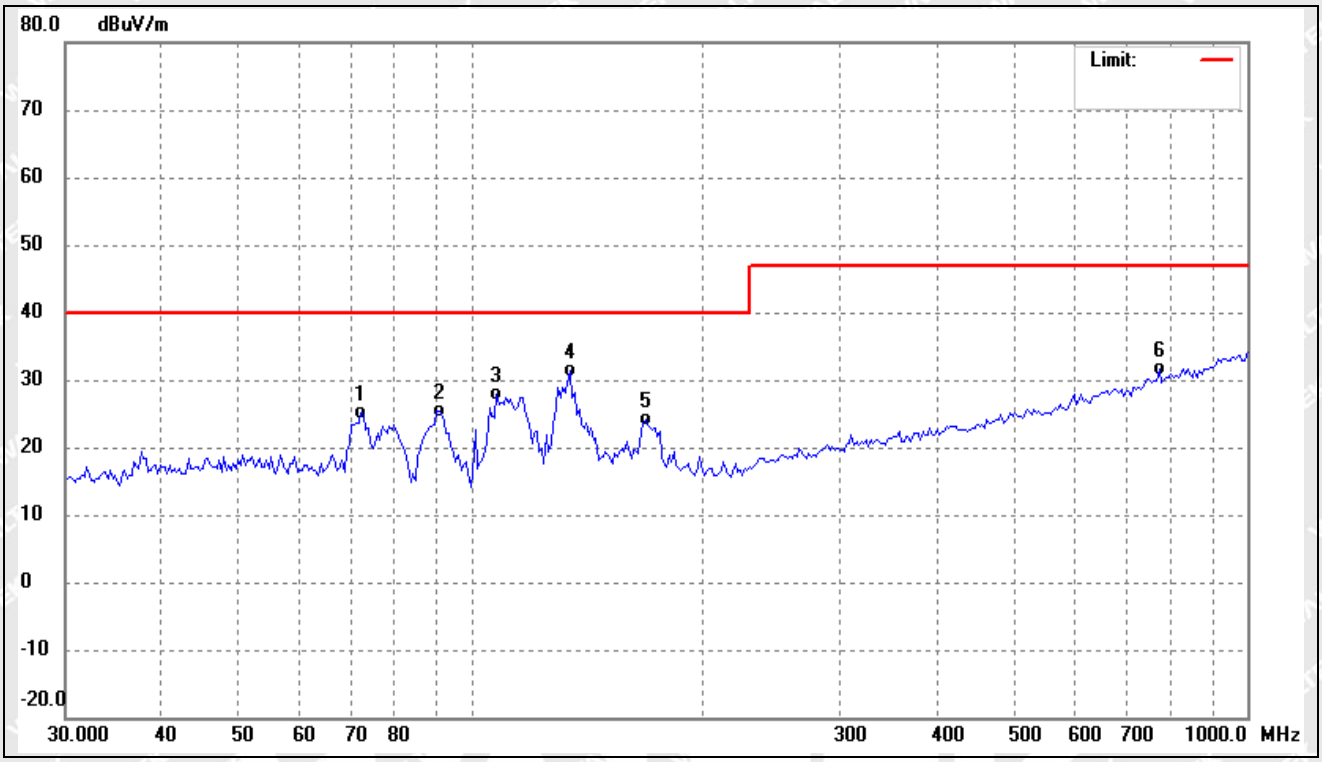
Please find the results below:

Test mode:	TM1	Polarity:	Horizontal



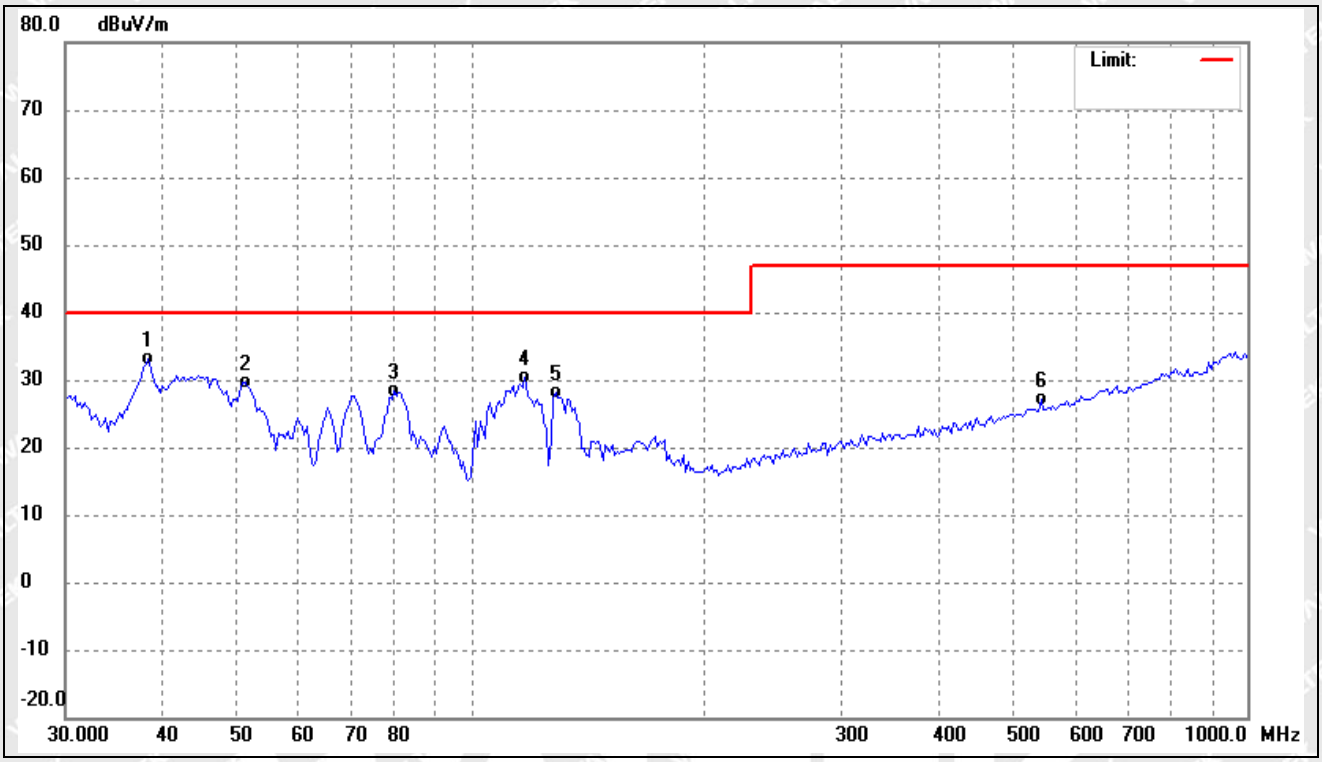
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	114.0184	39.10	-11.43	27.67	40.00	-12.33	QP
2	131.2235	41.33	-10.01	31.32	40.00	-8.68	QP
3	166.6385	39.04	-8.75	30.29	40.00	-9.71	QP
4	198.6424	37.98	-11.50	26.48	40.00	-13.52	QP
5	276.3818	32.84	-8.46	24.38	47.00	-22.62	QP
6	952.0001	30.90	2.95	33.85	47.00	-13.15	QP

Test mode:	TM1	Polarity:	Vertical



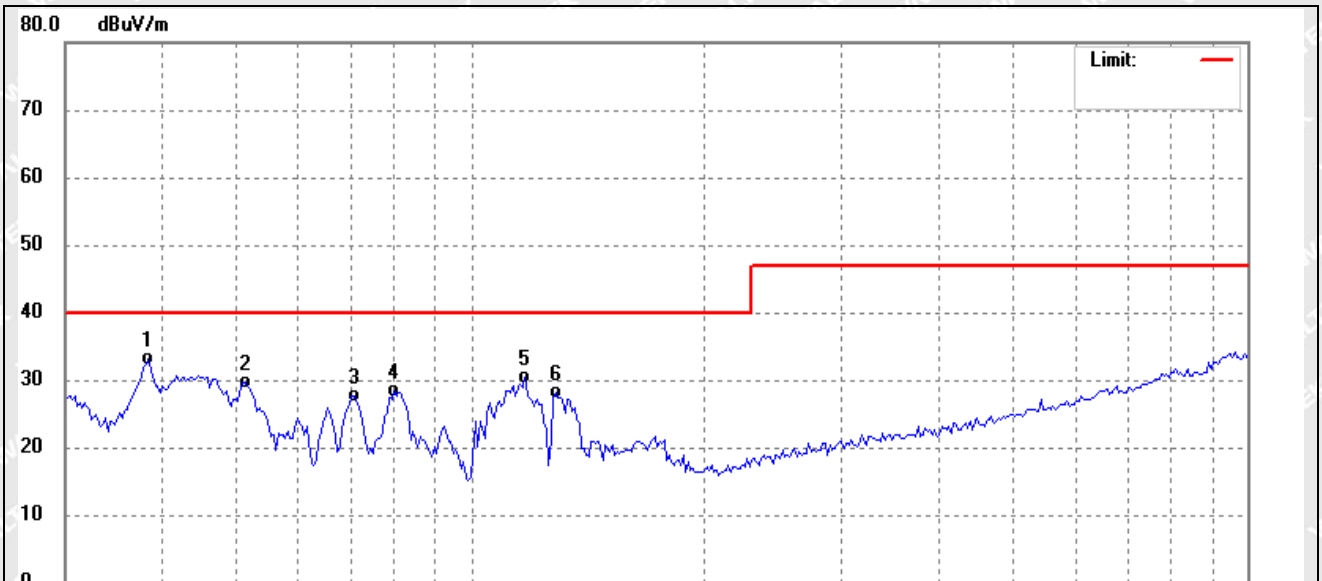
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	72.2111	36.64	-11.51	25.13	40.00	-14.87	QP
2	91.0574	39.86	-14.44	25.42	40.00	-14.58	QP
3	107.7854	40.10	-12.28	27.82	40.00	-12.18	QP
4	134.0194	41.22	-9.74	31.48	40.00	-8.52	QP
5	167.8136	32.90	-8.76	24.14	40.00	-15.86	QP
6	771.0475	31.04	0.53	31.57	47.00	-15.43	QP

Test mode:	TM2	Polarity:	Horizontal



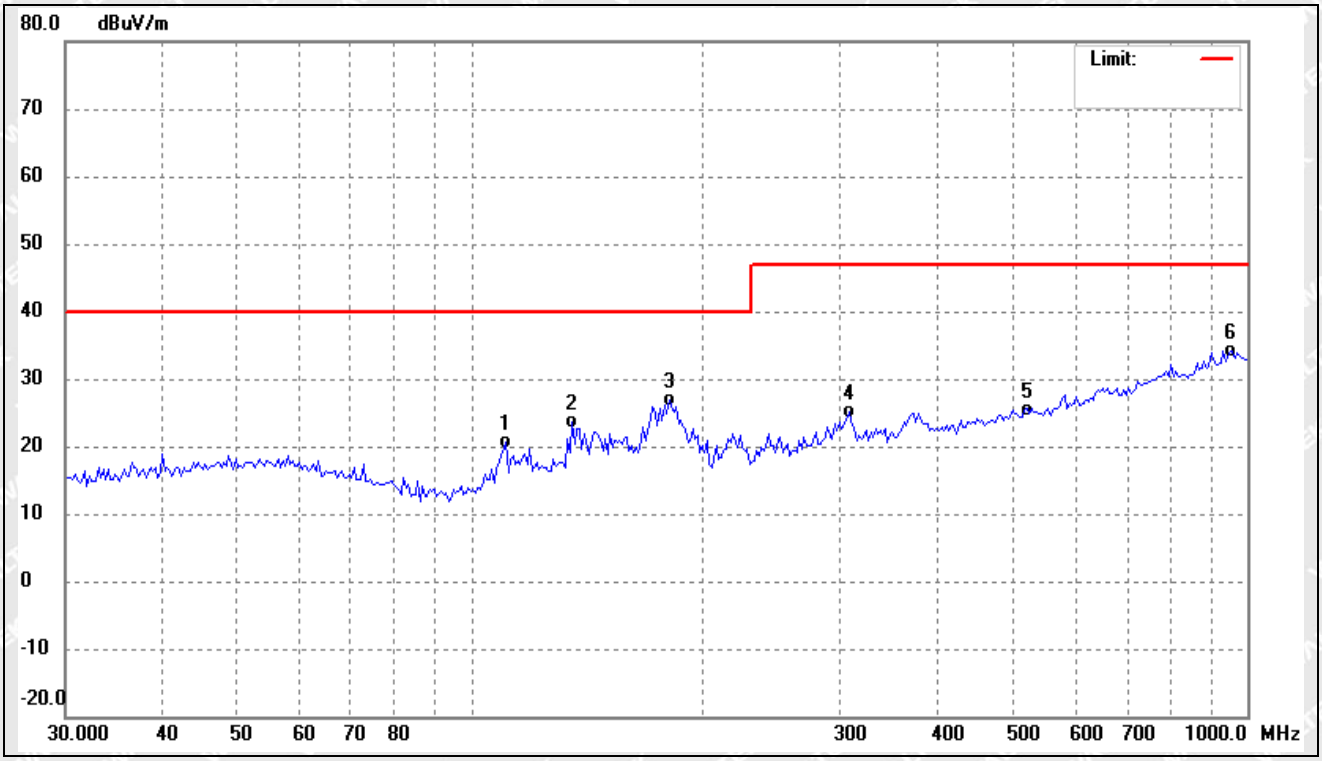
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	38.3651	42.96	-9.76	33.20	40.00	-6.80	QP
2	51.1756	38.67	-8.99	29.68	40.00	-10.32	QP
3	79.6764	41.30	-12.96	28.34	40.00	-11.66	QP
4	117.2688	41.58	-11.14	30.44	40.00	-9.56	QP
5	128.4861	38.35	-10.17	28.18	40.00	-11.82	QP
6	542.6104	30.94	-3.81	27.13	47.00	-19.87	QP

Test mode:	TM2	Polarity:	Vertical



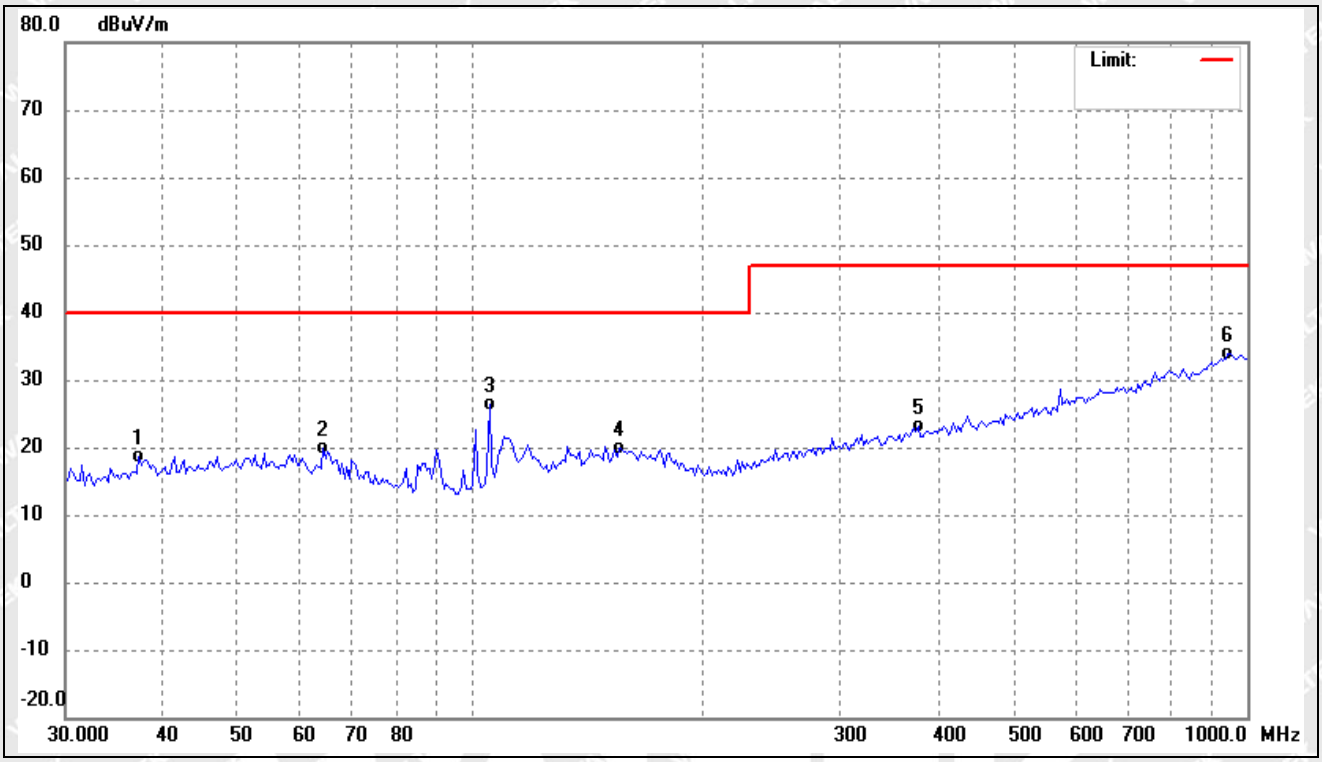
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	38.3651	42.96	-9.76	33.20	40.00	-6.80	QP
2	51.1756	38.67	-8.99	29.68	40.00	-10.32	QP
3	70.7047	38.82	-11.25	27.57	40.00	-12.43	QP
4	79.6764	41.30	-12.96	28.34	40.00	-11.66	QP
5	117.2688	41.58	-11.14	30.44	40.00	-9.56	QP
6	128.4861	38.35	-10.17	28.18	40.00	-11.82	QP

Test mode:	TM3	Polarity:	Horizontal



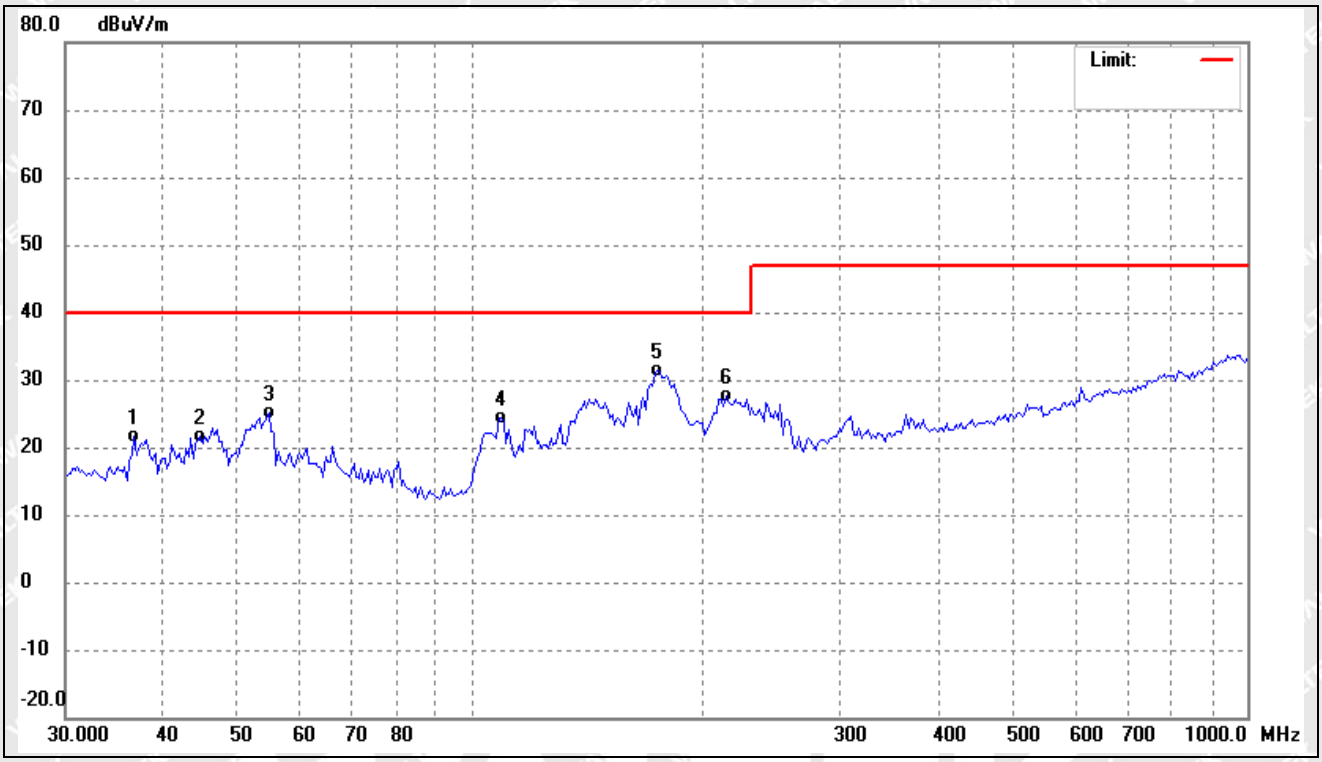
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	110.8581	32.53	-11.86	20.67	40.00	-19.33	QP
2	134.9645	33.17	-9.66	23.51	40.00	-16.49	QP
3	180.0304	36.67	-9.87	26.80	40.00	-13.20	QP
4	307.1053	32.79	-7.60	25.19	47.00	-21.81	QP
5	516.5651	29.47	-4.01	25.46	47.00	-21.54	QP
6	952.0001	31.20	2.95	34.15	47.00	-12.85	QP

Test mode:	TM3	Polarity:	Vertical



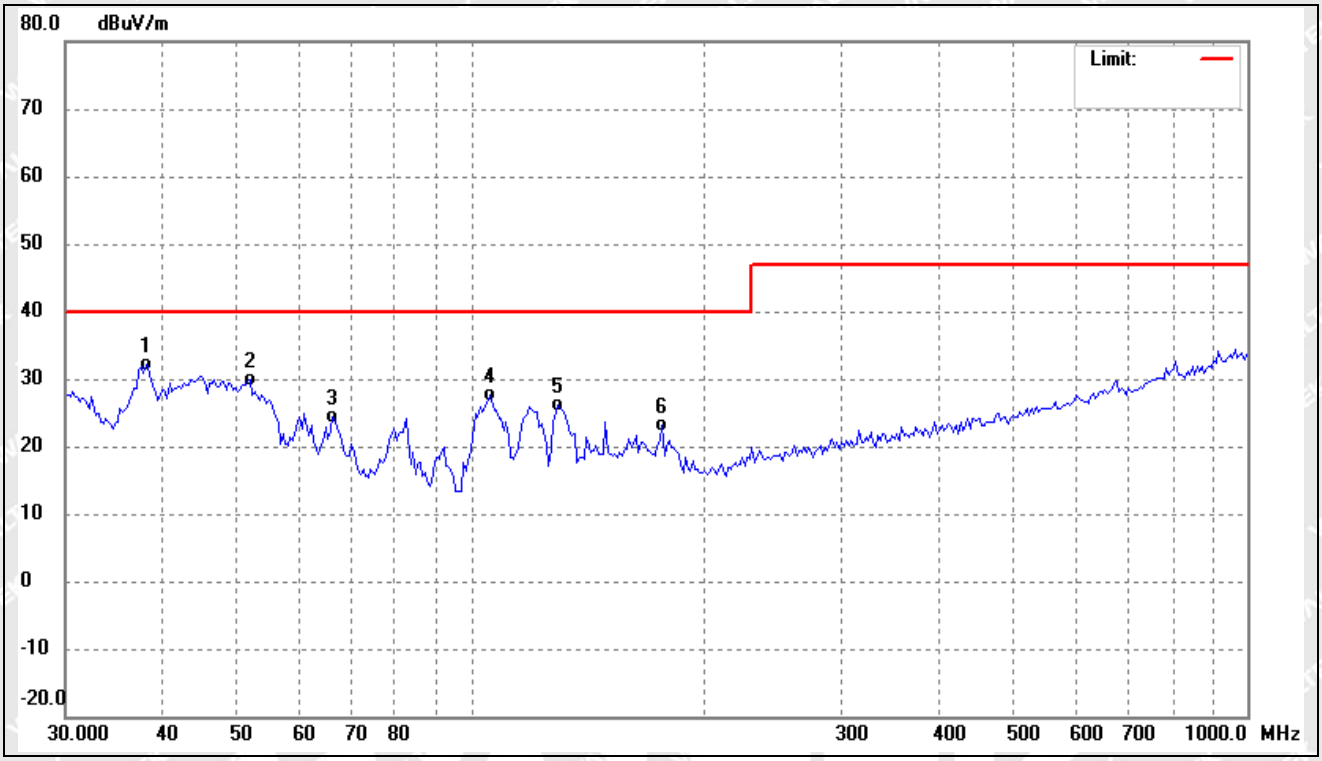
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	37.3017	28.41	-9.90	18.51	40.00	-21.49	QP
2	64.5319	30.00	-10.14	19.86	40.00	-20.14	QP
3	105.5369	39.04	-12.66	26.38	40.00	-13.62	QP
4	155.3305	28.41	-8.62	19.79	40.00	-20.21	QP
5	376.5227	29.69	-6.55	23.14	47.00	-23.86	QP
6	945.3336	31.06	2.85	33.91	47.00	-13.09	QP

Test mode:	TM4	Polarity:	Horizontal



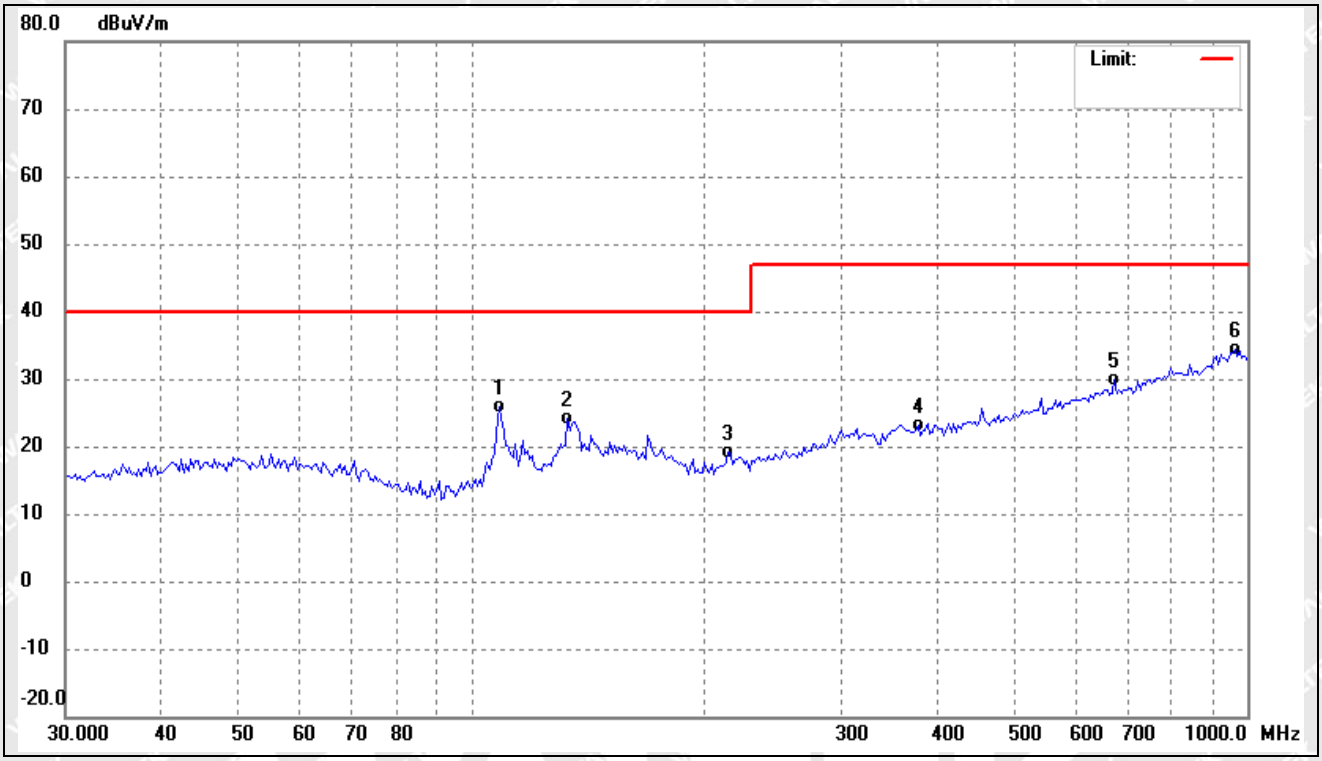
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	36.7811	31.53	-9.97	21.56	40.00	-18.44	QP
2	44.7793	30.74	-9.08	21.66	40.00	-18.34	QP
3	54.9011	34.26	-9.20	25.06	40.00	-14.94	QP
4	108.5455	36.58	-12.17	24.41	40.00	-15.59	QP
5	173.8146	40.62	-9.18	31.44	40.00	-8.56	QP
6	213.1035	39.20	-11.68	27.52	40.00	-12.48	QP

Test mode:	TM4	Polarity:	Vertical



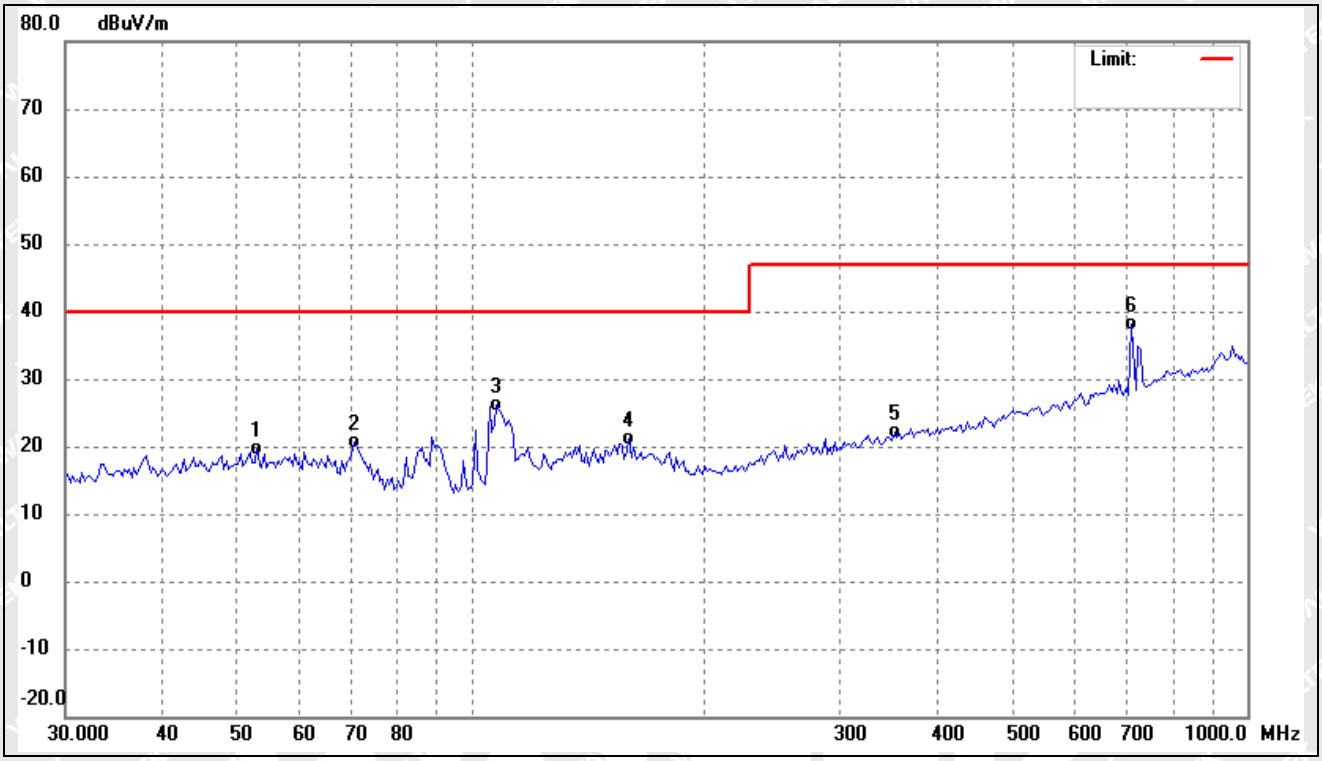
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	38.0965	42.04	-9.79	32.25	40.00	-7.75	QP
2	51.8998	38.81	-9.00	29.81	40.00	-10.19	QP
3	66.3714	34.85	-10.41	24.44	40.00	-15.56	QP
4	105.5369	40.18	-12.66	27.52	40.00	-12.48	QP
5	129.3923	36.34	-10.12	26.22	40.00	-13.78	QP
6	176.2748	32.42	-9.39	23.03	40.00	-16.97	QP

Test mode:	TM5	Polarity:	Horizontal



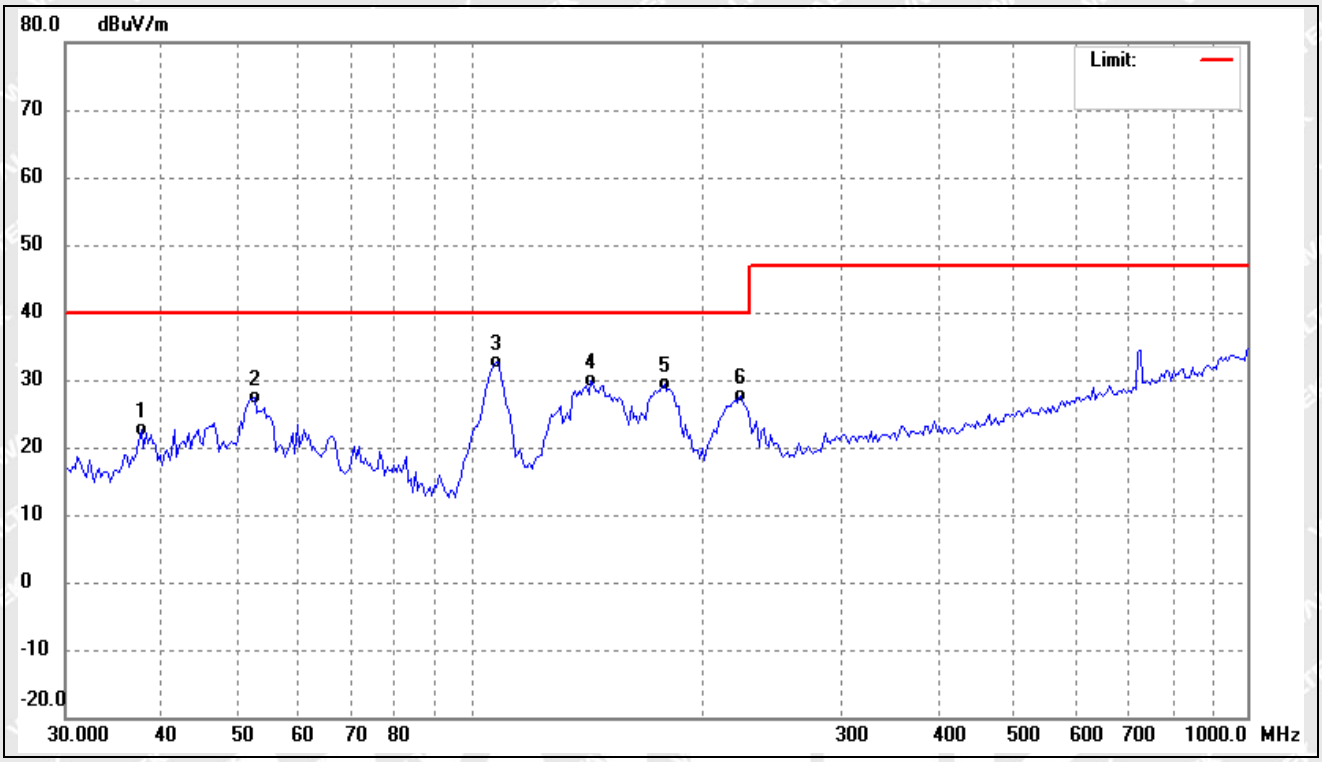
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	108.5455	38.11	-12.17	25.94	40.00	-14.06	QP
2	133.0809	33.88	-9.85	24.03	40.00	-15.97	QP
3	214.6063	30.73	-11.66	19.07	40.00	-20.93	QP
4	376.5227	29.76	-6.55	23.21	47.00	-23.79	QP
5	674.6768	30.92	-1.14	29.78	47.00	-17.22	QP
6	965.4742	31.32	2.98	34.30	47.00	-12.70	QP

Test mode:	TM5	Polarity:	Vertical



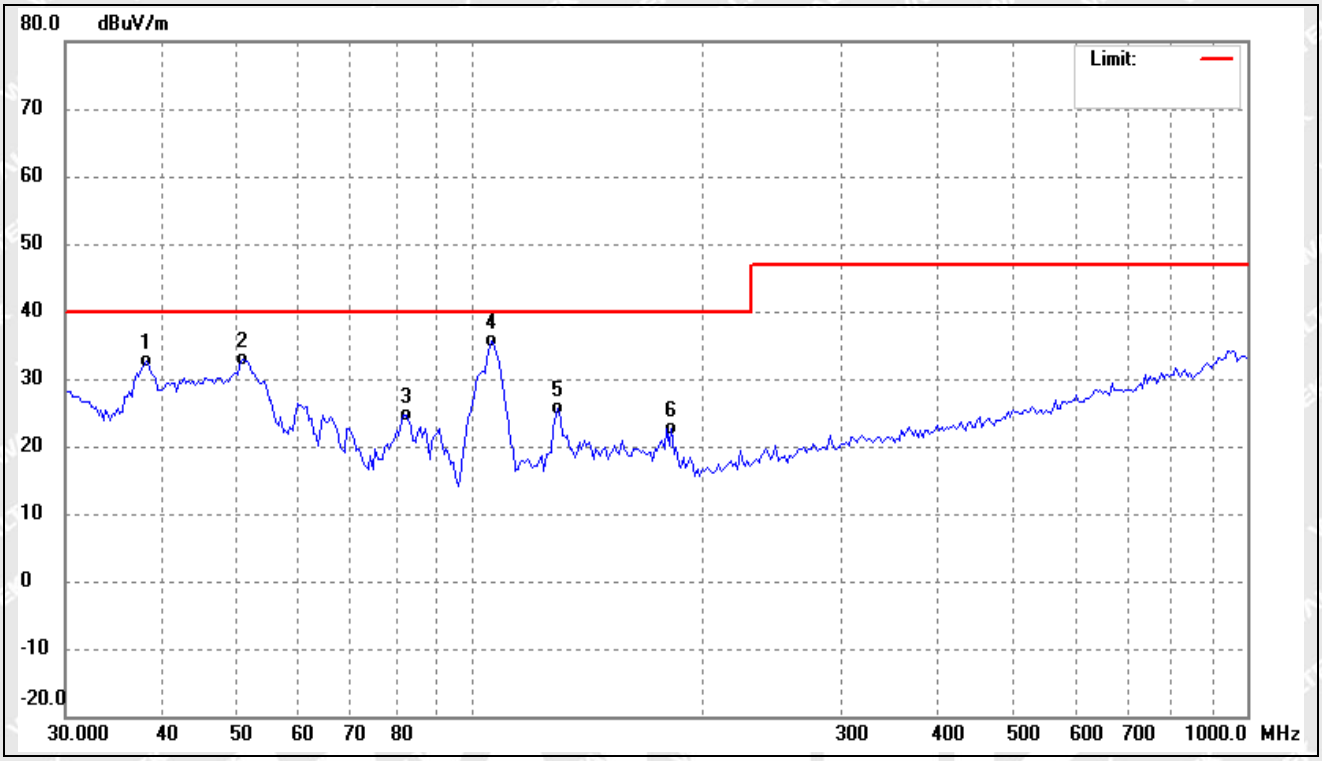
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	53.0056	28.67	-9.06	19.61	40.00	-20.39	QP
2	70.7047	31.81	-11.25	20.56	40.00	-19.44	QP
3	107.7854	38.44	-12.28	26.16	40.00	-13.84	QP
4	159.7586	29.62	-8.53	21.09	40.00	-18.91	QP
5	350.9722	29.14	-7.01	22.13	47.00	-24.87	QP
6	708.6941	39.00	-0.77	38.23	47.00	-8.77	QP

Test mode:	TM6	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	37.5648	32.42	-9.87	22.55	40.00	-17.45	QP
2	52.6345	36.51	-9.04	27.47	40.00	-12.53	QP
3	107.7854	44.94	-12.28	32.66	40.00	-7.34	QP
4	142.7692	39.08	-9.19	29.89	40.00	-10.11	QP
5	177.5179	39.04	-9.56	29.48	40.00	-10.52	QP
6	222.2807	39.07	-11.50	27.57	40.00	-12.43	QP

Test mode:	TM6	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	38.0965	42.48	-9.79	32.69	40.00	-7.31	QP
2	50.8172	41.82	-8.98	32.84	40.00	-7.16	QP
3	82.5257	38.27	-13.53	24.74	40.00	-15.26	QP
4	106.2812	48.06	-12.53	35.53	40.00	-4.47	QP
5	129.3923	35.78	-10.12	25.66	40.00	-14.34	QP
6	181.3000	32.70	-10.00	22.70	40.00	-17.30	QP

6. Harmonic Current Emissions

6.1 Test Procedure

Test is conducted under the description of IEC 61000-3-2.

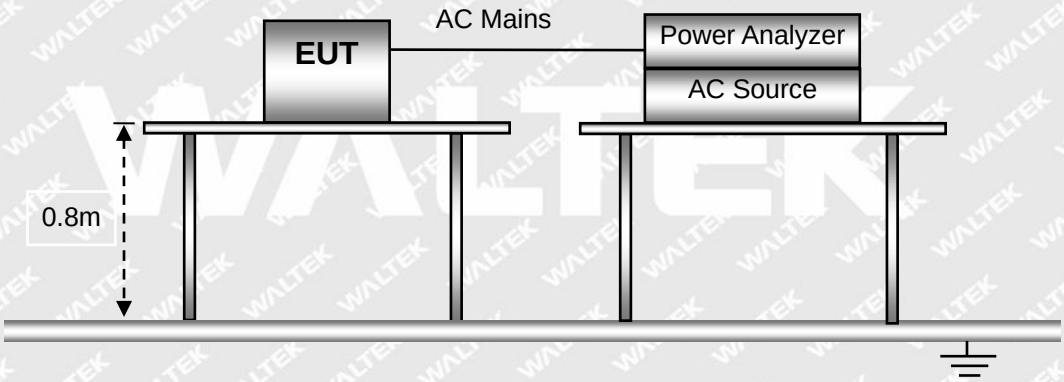
6.2 Test Standards

IEC 61000-3-2, Clause 7.2 Limits for Class C equipment.

6.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	998 mbar

6.4 Basic Test Setup Block Diagram



6.5 Harmonic Current Emissions Test Data

Test mode:	TM1

Harmonics – Class-C

Test category: Class-C (European limits) **Test Margin: 100**

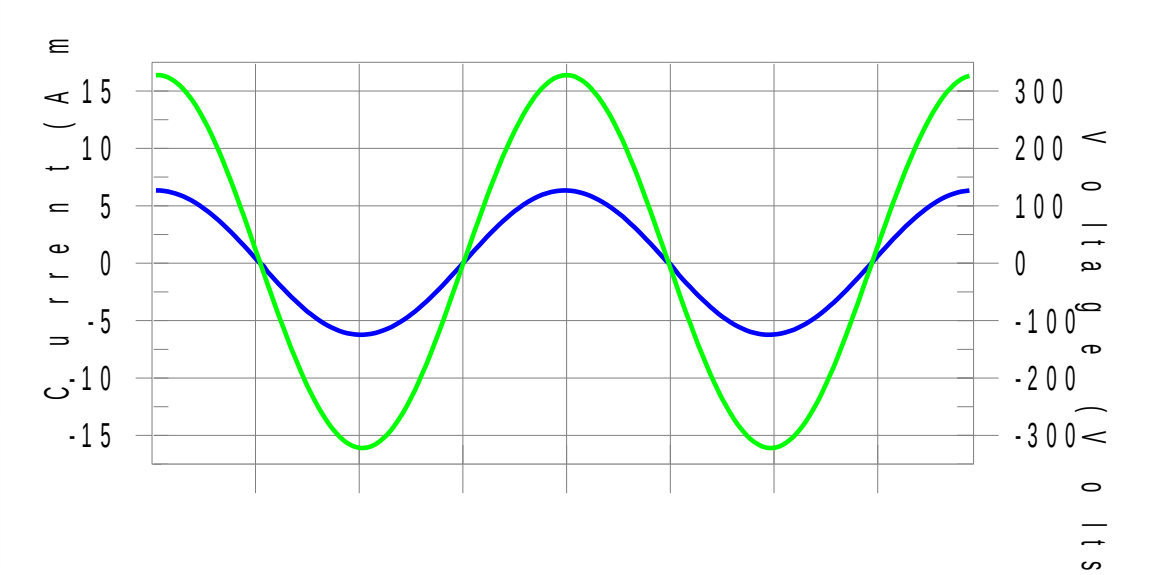
Test date: 2025/7/7 **Start time: 15:47:43** **End time: 15:50:25**

Test duration (min): 2.5 **Data file name: H-000641.cts_data**

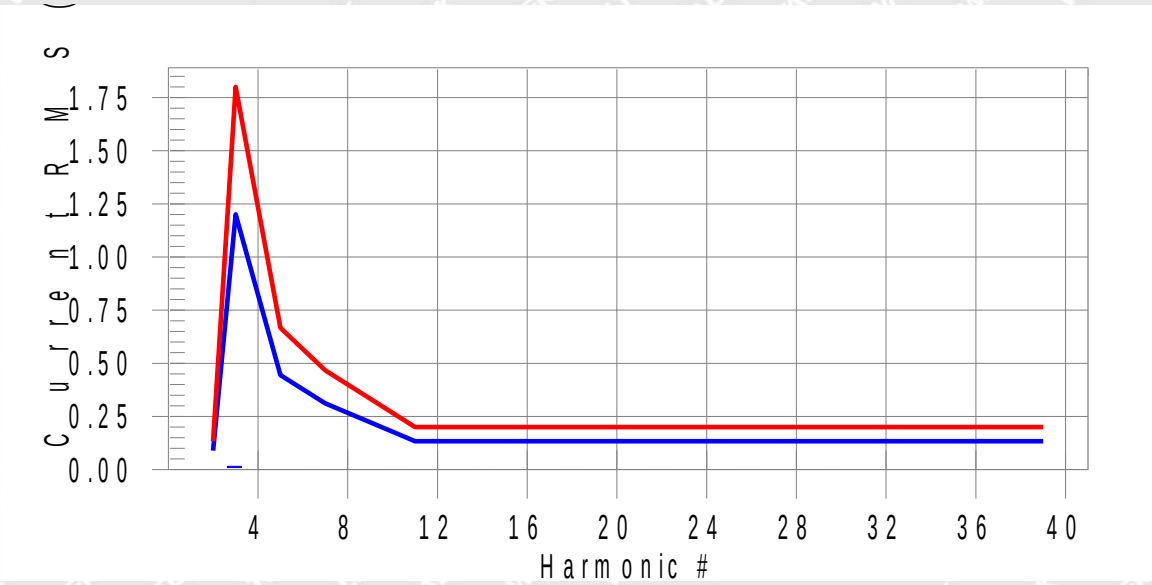
Comment: TM1

Test Result: Pass **Source qualification: Normal**

Current & voltage waveforms



Harmonics and Class C limit line **European Limits**



Test result: Pass **Worst harmonics H0-0.0% of 150% limit, H0-0% of 100% limit**

Current Test Result Summary (Run time)

Test category: Class-C (European limits) **Test Margin: 100**
Test date: 2025/7/7 **Start time: 15:47:43** **End time: 15:50:25**
Test duration (min): 2.5 **Data file name: H-000641.cts_data**
Comment: TM1

Test Result: Pass **Source qualification: Normal**
THC(A): 0.020 **I-THD(%): 0.4** **POHC(A): 0.006** **POHC Limit(A): 0.422**

Highest parameter values during test:

V_RMS (Volts):	229.78	Frequency(Hz):	50.00
I_Peak (Amps):	6.361	I_RMS (Amps):	4.448
I_Fund (Amps):	4.446	Crest Factor:	1.430
Power (Watts):	1021.8	Power Factor:	1.000

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.089	N/A	0.003	0.133	N/A	Pass
3	0.015	1.200	N/A	0.016	1.800	N/A	Pass
4	0.002	0.000	N/A	0.003	0.000	N/A	Pass
5	0.001	0.445	N/A	0.001	0.667	N/A	Pass
6	0.002	0.000	N/A	0.002	0.000	N/A	Pass
7	0.003	0.311	N/A	0.004	0.467	N/A	Pass
8	0.002	0.000	N/A	0.002	0.000	N/A	Pass
9	0.002	0.222	N/A	0.003	0.333	N/A	Pass
10	0.002	0.000	N/A	0.002	0.000	N/A	Pass
11	0.002	0.133	N/A	0.002	0.200	N/A	Pass
12	0.002	0.000	N/A	0.002	0.000	N/A	Pass
13	0.002	0.133	N/A	0.002	0.200	N/A	Pass
14	0.002	0.000	N/A	0.002	0.000	N/A	Pass
15	0.002	0.133	N/A	0.002	0.200	N/A	Pass
16	0.002	0.000	N/A	0.002	0.000	N/A	Pass
17	0.002	0.133	N/A	0.002	0.200	N/A	Pass
18	0.002	0.000	N/A	0.002	0.000	N/A	Pass
19	0.002	0.133	N/A	0.002	0.200	N/A	Pass
20	0.002	0.000	N/A	0.002	0.000	N/A	Pass
21	0.002	0.133	N/A	0.002	0.200	N/A	Pass
22	0.002	0.000	N/A	0.002	0.000	N/A	Pass
23	0.002	0.133	N/A	0.002	0.200	N/A	Pass
24	0.002	0.000	N/A	0.002	0.000	N/A	Pass
25	0.002	0.133	N/A	0.002	0.200	N/A	Pass
26	0.002	0.000	N/A	0.002	0.000	N/A	Pass

27	0.002	0.133	N/A	0.002	0.200	N/A	Pass
28	0.002	0.000	N/A	0.002	0.000	N/A	Pass
29	0.002	0.133	N/A	0.002	0.200	N/A	Pass
30	0.002	0.000	N/A	0.002	0.000	N/A	Pass
31	0.002	0.133	N/A	0.002	0.200	N/A	Pass
32	0.002	0.000	N/A	0.002	0.000	N/A	Pass
33	0.002	0.133	N/A	0.002	0.200	N/A	Pass
34	0.002	0.000	N/A	0.002	0.000	N/A	Pass
35	0.002	0.133	N/A	0.002	0.200	N/A	Pass
36	0.002	0.000	N/A	0.002	0.000	N/A	Pass
37	0.001	0.133	N/A	0.002	0.200	N/A	Pass
38	0.001	0.000	N/A	0.001	0.000	N/A	Pass
39	0.001	0.133	N/A	0.001	0.200	N/A	Pass
40	0.001	0.000	N/A	0.001	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

Voltage Source Verification Data (Run time)

Test category: Class-C (European limits) **Test Margin: 100**
Test date: 2025/7/7 **Start time: 15:47:43** **End time: 15:50:25**
Test duration (min): 2.5 **Data file name: H-000641.cts_data**
Comment: TM1

Test Result: Pass **Source qualification: Normal**

Highest parameter values during test:

Voltage (Vrms):	**229.78**	**Frequency(Hz):**	**50.00**
I_Peak (Amps):	**6.361**	**I_RMS (Amps):**	**4.448**
I_Fund (Amps):	**4.446**	**Crest Factor:**	**1.430**
Power (Watts):	**1021.8**	**Power Factor:**	**1.000**

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.064	0.459	13.96	OK
3	0.594	2.068	28.75	OK
4	0.071	0.459	15.54	OK
5	0.100	0.919	10.88	OK
6	0.046	0.459	9.92	OK
7	0.068	0.689	9.89	OK
8	0.020	0.459	4.34	OK
9	0.018	0.459	3.97	OK
10	0.019	0.459	4.04	OK
11	0.016	0.230	7.14	OK
12	0.013	0.230	5.70	OK
13	0.018	0.230	7.77	OK
14	0.012	0.230	5.11	OK
15	0.014	0.230	6.07	OK
16	0.009	0.230	3.90	OK
17	0.016	0.230	6.97	OK
18	0.012	0.230	5.04	OK
19	0.011	0.230	4.94	OK
20	0.014	0.230	6.01	OK
21	0.007	0.230	3.19	OK
22	0.003	0.230	1.21	OK
23	0.007	0.230	2.97	OK
24	0.007	0.230	2.93	OK
25	0.004	0.230	1.83	OK
26	0.005	0.230	2.06	OK
27	0.008	0.230	3.51	OK

28	**0.005**	**0.230**	**2.00**	**OK**
29	**0.008**	**0.230**	**3.48**	**OK**
30	**0.004**	**0.230**	**1.65**	**OK**
31	**0.004**	**0.230**	**1.78**	**OK**
32	**0.003**	**0.230**	**1.42**	**OK**
33	**0.006**	**0.230**	**2.49**	**OK**
34	**0.004**	**0.230**	**1.67**	**OK**
35	**0.004**	**0.230**	**1.58**	**OK**
36	**0.003**	**0.230**	**1.27**	**OK**
37	**0.006**	**0.230**	**2.69**	**OK**
38	**0.003**	**0.230**	**1.29**	**OK**
39	**0.004**	**0.230**	**1.90**	**OK**
40	**0.010**	**0.230**	**4.17**	**OK**

7. Voltage Fluctuation Flicker

7.1 Test Procedure

Test is conducted under the description of IEC 61000-3-3.

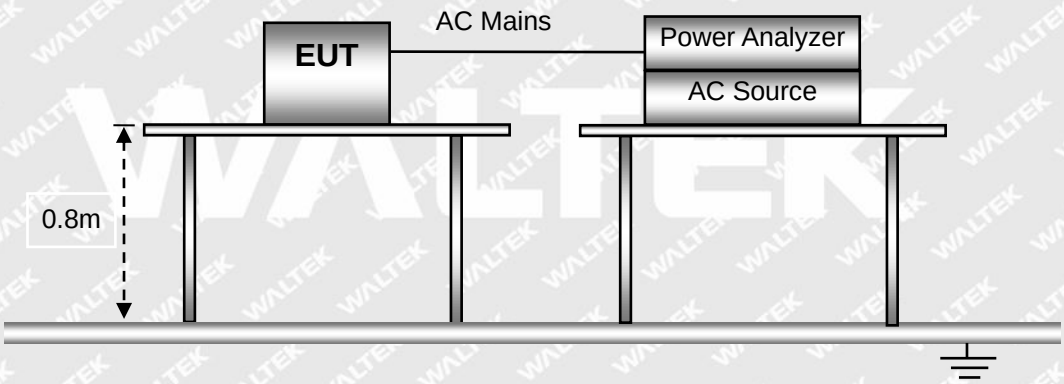
7.2 Test Standards

IEC 61000-3-3, Limit: Clause 5.

7.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	998 mbar

7.4 Basic Test Setup Block Diagram

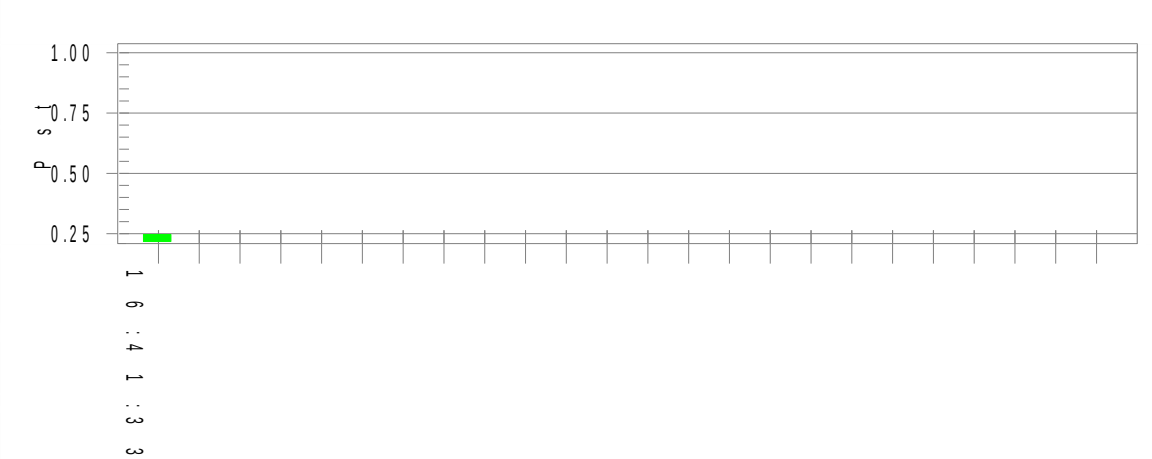


7.5 Voltage Fluctuation and Flicker Test Data

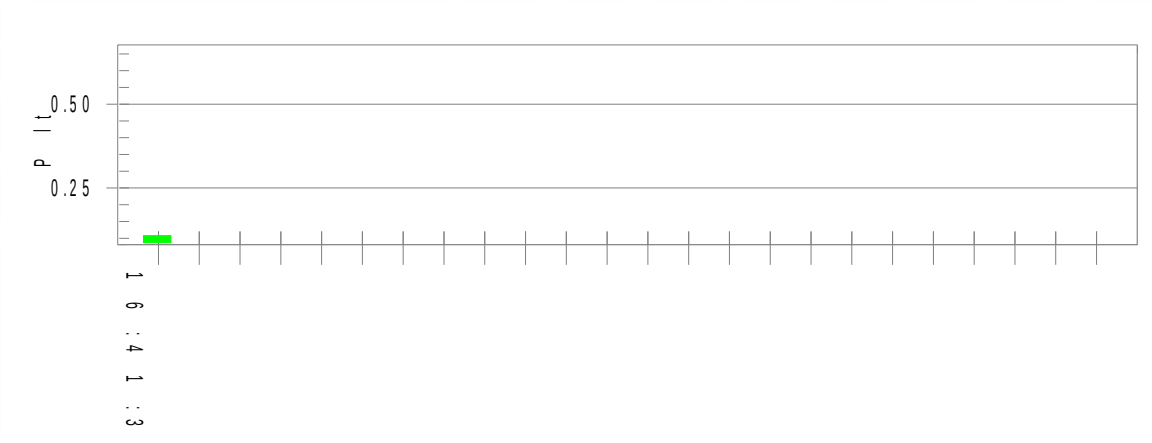
Test mode:	TM2

Test Result: Pass **Status: Test Completed**

Pst_t and limit line **European Limits**



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	**229.78**			
T-max (mS):	**0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.247**	**Test limit:**	**1.000**	**Pass**
Highest Plt (2 hr. period):	**0.108**	**Test limit:**	**0.650**	**Pass**

8. Electrostatic Discharges (ESD)

8.1 Test Procedure

Test is conducted under the description of IEC 61000-4-2.

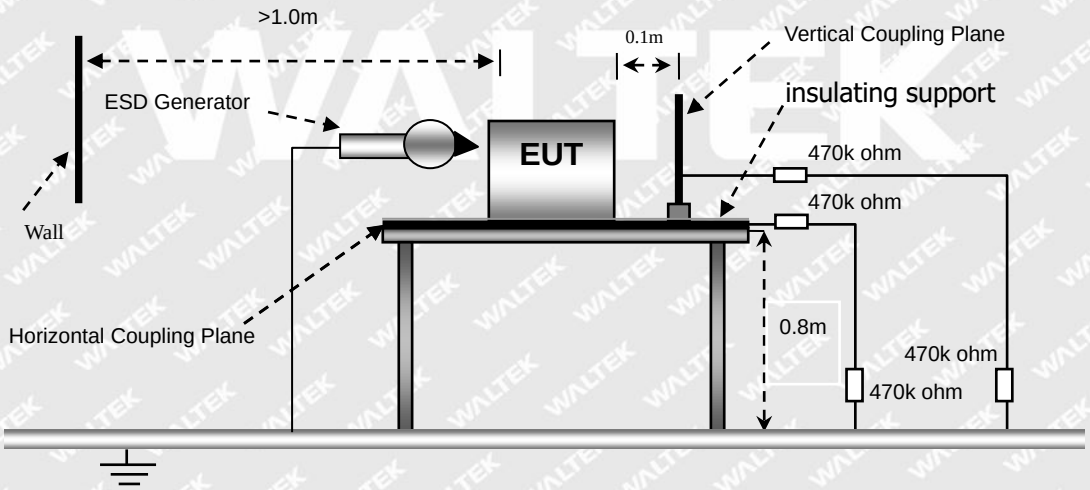
8.2 Test Performance

Performance Criterion: B

8.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51%
ATM Pressure:	998 mbar

8.4 Basic Test Setup Block Diagram



8.5 Electrostatic Discharge Immunity Test Data

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6

Table 1: Electrostatic Discharge Immunity (Air Discharge)

IEC 61000-4-2	Test Voltage (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Gap	A	A	A	A	A	A	A	A	/	/
Enclosure	A	A	A	A	A	A	A	A	/	/
Button	A	A	A	A	A	A	A	A	/	/

Table 2: Electrostatic Discharge Immunity (Direct Contact)

IEC 61000-4-2	Test Voltage (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Screw	A	A	A	A	/	/	/	/	/	/
Metal Enclosure	A	A	A	A	/	/	/	/	/	/

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP & VCP)

IEC 61000-4-2	Test Voltage (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
HCP (6 Sides)	A	A	A	A	/	/	/	/	/	/
VCP (4 Sides)	A	A	A	A	/	/	/	/	/	/

Test Result: Pass

9. Continuous RF Electromagnetic Field Disturbances (RS)

9.1 Test Procedure

Test is conducted under the description of IEC 61000-4-3.

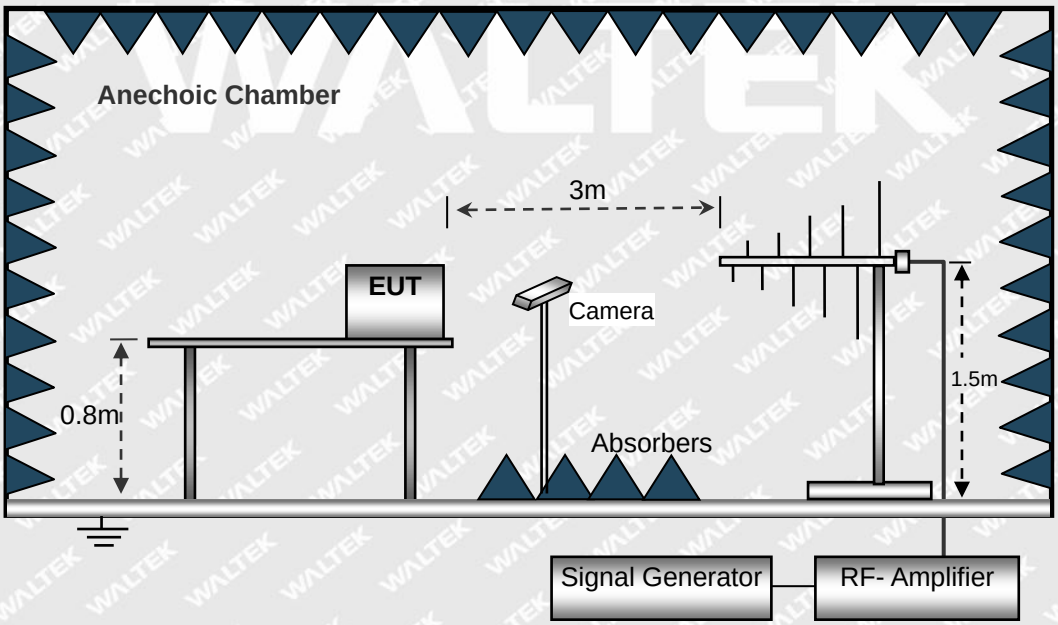
9.2 Test Performance

Performance Criterion: A

9.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	998 mbar

9.4 Basic Test Setup Block Diagram



9.5 Continuous Radiated Disturbances Test Data

Frequency step: 1% of fundamental
Dwell time: 1 second
Modulation: AM by 1kHz sine wave with 80% modulation depth

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A

Test Result: Pass

10. Electrical Fast Transients (EFT)

10.1 Test Procedure

Test is conducted under the description of IEC 61000-4-4.

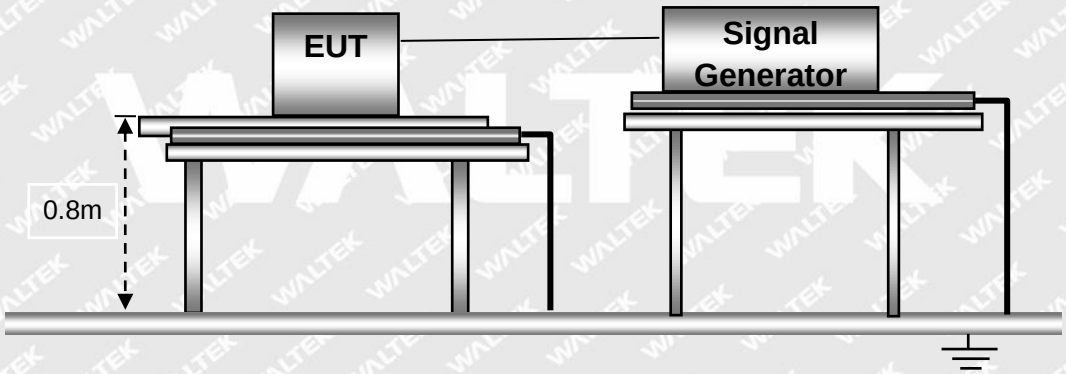
10.2 Test Performance

Performance Criterion: B

10.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	998 mbar

10.4 Basic Test Setup Block Diagram



10.5 Electrical Fast Transients Test Data

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6

IEC 61000-4-4 Test Points		Test Voltage (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Port of EUT	L	A	A	A	A	/	/	/	/
	N	A	A	A	A	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L+N	A	A	A	A	/	/	/	/
	L+PE	/	/	/	/	/	/	/	/
	N+PE	/	/	/	/	/	/	/	/
	L+N+PE	/	/	/	/	/	/	/	/
DC port	Positive/Negative	/	/	/	/	/	/	/	/
Signal ports	RJ45	/	/	/	/	/	/	/	/

Test Result: Pass

11. Surges

11.1 Test Procedure

Test is conducted under the description of IEC 61000-4-5.

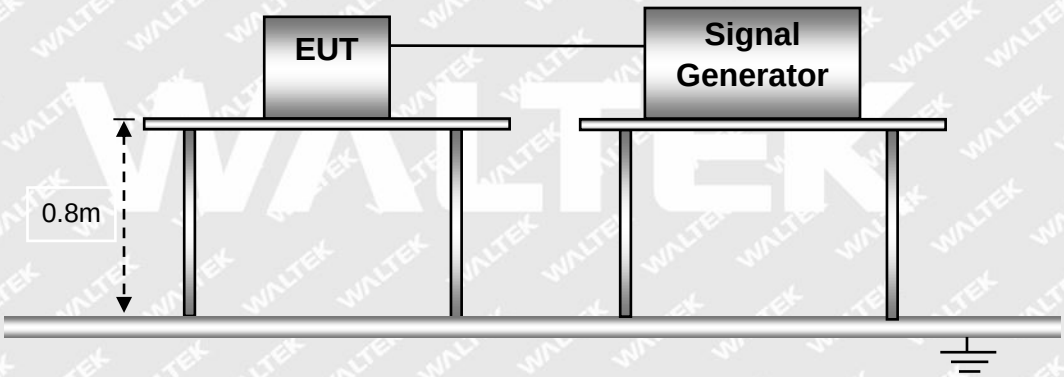
11.2 Test Performance

Performance Criterion: B

11.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	998 mbar

11.4 Basic Test Setup Block Diagram



11.5 Surge Test Data

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6

Test Voltage (kV)	Poll	Path	Pass	Fail
0.5kV	±	L-N	/	/
1kV	±	L-N	A	/
2kV	±	L-PE, N-PE	/	/
4kV	±	L-N, L-PE, N-PE	/	/

Test Result: Pass

12. Continuous Induced RF Disturbances (C/S)

12.1 Test Procedure

Test is conducted under the description of IEC 61000-4-6.

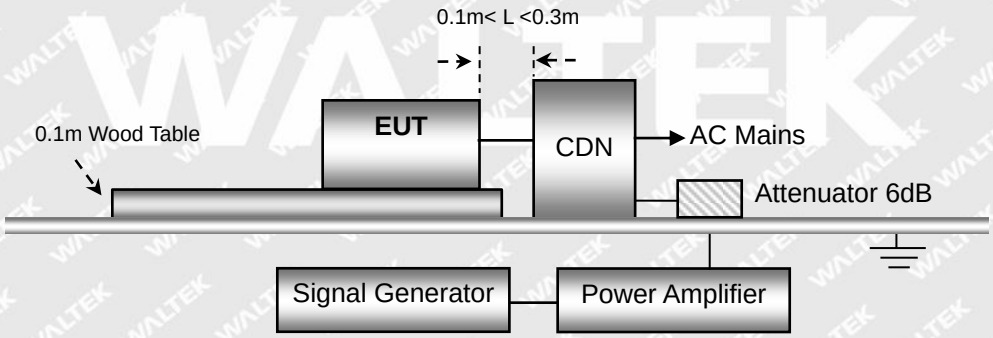
12.2 Test Performance

Performance Criterion: A

12.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	998 mbar

12.4 Basic Test Setup Block Diagram



12.5 Continuous Conducted Disturbances Test Data

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6
Sweep frequency range: 0.15MHz to 80MHz
Frequency step: 1% of fundamental
Dwell time: 1 second

AC Port

Frequency MHz	Injected Position	Voltage level (e.m.f.)	Observations (Performance Criterion)	Result
0.15-80	AC Mains	1V	/	Pass
0.15-80	AC Mains	3V	A	Pass
0.15-80	AC Mains	10V	/	Pass

Test Result: Pass

13. Power-Frequency Magnetic Fields (PFMF)

13.1 Test Procedure

Test is conducted under the description of IEC 61000-4-8.

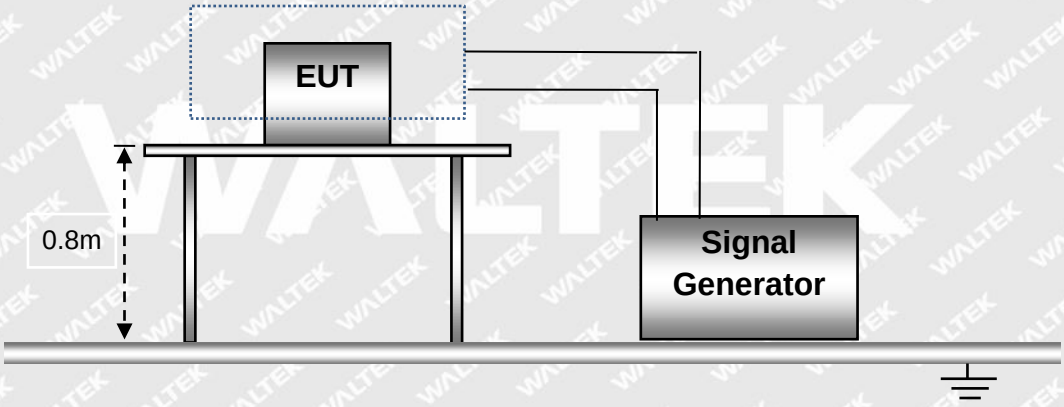
13.2 Test Performance

Performance Criterion: A

13.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	998 mbar

13.4 Basic Test Setup Block Diagram



13.5 Power-Frequency Magnetic Field Test Data

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6

Level	Magnetic Field Strength (r.m.s) A/m	Frequency Hz	Induction Coil Postion	Pass	Fail
1	1	50/60	X, Y, Z	/	/
2	3	50/60	X, Y, Z	A	/
3	10	50/60	X, Y, Z	/	/
X	Special	/	/	/	/

Test Result: Pass

14. Voltage Dips and Interruptions

14.1 Test Procedure

Test is conducted under the description of IEC 61000-4-11.

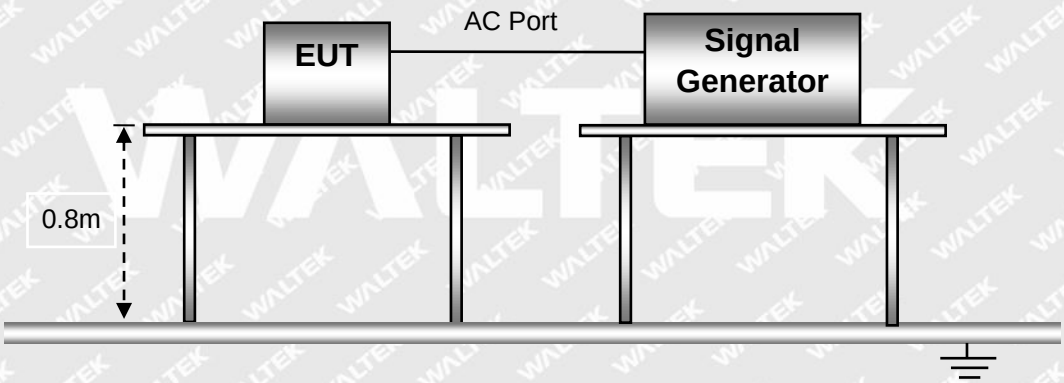
14.2 Test Performance

Performance Criterion: B/C

14.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	998 mbar

14.4 Basic Test Setup Block Diagram



14.5 Voltage Dips And Interruptions Test Data

U: Vlotage dips in % U_T (U_T is rated voltage for the EUT)
T: Test duration

Test Mode: TM1, TM2, TM3, TM4, TM5, TM6

Level	U	T	Phase Angle	Pass	Fail
1	100	200ms	0/90/180/270	B	/
3	60	200ms	0/90/180/270	B	/
2	30	200ms	0/90/180/270	B	/

Test Result: Pass

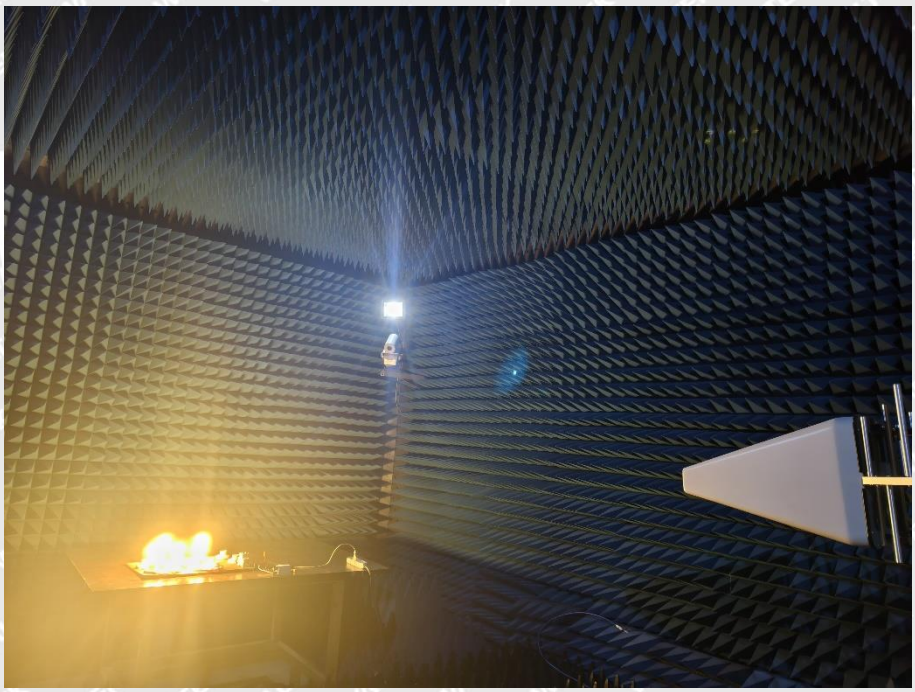
EXHIBIT 1 - EUT PHOTOGRAPHS

Please refer to “ANNEX”.

EXHIBIT 2 - TEST SETUP PHOTOGRAPHS

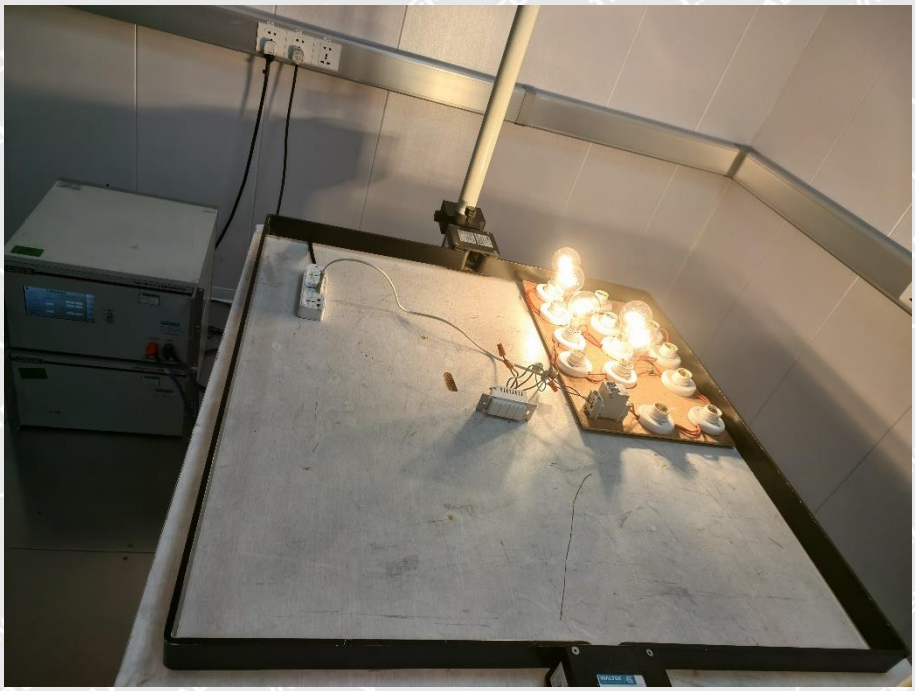
Conducted Emission Test Setup	
Radiation Emission Test View (9kHz~30MHz)	

Radiation Emission Test View(30MHz to 1GHz)	
Harmonic/Flicker Test View	

EN 61000-4-2 Test View	
EN 61000-4-3 Test View	

EN 61000-4-4 Test View	
EN 61000-4-5 Test View	

EN 61000-4-11 Test View	
EN 61000-4-6 Test View	

IEC 61000-4-8 Test View	

******* END OF REPORT *******